

THE UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS
JANUARY 1, 1900

TO THE PRESIDENT OF THE UNIVERSITY OF CHICAGO

FROM THE FACULTY OF THE UNIVERSITY OF CHICAGO

RESOLUTION

WHEREAS the Faculty of the University of Chicago

has the honor to receive from the President of the University of Chicago

a copy of the report of the Committee on the Faculty of the University of Chicago

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The University of Chicago

FOUNDED BY JOHN D. ROCKEFELLER

3

CIRCULAR OF INFORMATION

VOL. IV

AUGUST, 1904

NO. 6

SIXTY-SECOND ANNUAL ANNOUNCEMENT OF

RUSH MEDICAL COLLEGE

CONTAINING THE

BULLETIN OF THE MEDICAL COURSES

OF THE

UNIVERSITY OF CHICAGO

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PUBLISHED EIGHT TIMES A YEAR

THE UNIVERSITY OF CHICAGO

FIFTY-EIGHTH STREET AND ELLIS AVENUE

CHICAGO, ILL.

HISTORY, PLAN OF GOVERNMENT, AND LOCATION.

Rush Medical College is one of the oldest institutions of learning in the Northwest, having been chartered by a special act of the legislature of the state of Illinois, in February, 1837. It was founded by the late Daniel Brainerd, who was its first president. The first course of lectures was delivered in the second story of the frame building on Clark street, near Randolph, in 1843. In 1844 a College building was erected at the corner of Dearborn avenue and Indiana street, a structure which was remodeled and enlarged in 1855. In 1867 a larger building was erected on the site of the old one. This edifice was destroyed in the great fire of 1871, and for three years the College occupied a temporary amphitheater in the grounds of the Cook County Hospital, then located at Arnold and Eighteenth streets. In 1875 the present Clinical Building was erected, and in 1893 a Laboratory Building, which greatly increased the facilities for practical instruction, was erected on the south side of Harrison street, opposite the Clinical Building. The facilities for clinical instruction were largely increased a year ago by the addition of the Senn Building, seven stories in height, adjoining the Clinical Building on the east. In 1887 the College became the Medical Department of the Lake Forest University, retaining, however, its autonomy. This relation was dissolved by mutual consent in April, 1898, and in the same month the present affiliation with the University of Chicago was established. In 1883 the Presbyterian Hospital, adjoining the College, was established, and the building then erected for the hospital was subsequently enlarged by the addition of the Daniel A. Jones Memorial. Rush Medical College is one of the several institutions officially recognized by the Royal Colleges of Physicians and Surgeons of London, England.

GOVERNMENT.

The government of the College is vested in a "perpetual Board of Trustees," distinct from the teaching force of the College, which was constituted by a special act of the general assembly of Illinois, in February, 1837, and of which the governor of the state, the lieutenant-governor, and the speaker of the house of representatives are members *ex officio*.

This board is responsible to the state for the careful management of the financial and educational interests of the College and for the discipline of its students.

AFFILIATION.

By the terms of affiliation with the University of Chicago, the Board of Trustees is composed of members not belonging to the teaching force of the College. This board assumes the financial management and appoints the Faculty, but delegates to the latter the control of the educational work subject to the rules of the University and the approval of the Trustees. The affiliation thus assures the maintenance of a high order of instruction and a steady advance in modern educational methods. The University offers three fellowships to graduates of the College, yielding the University fees and entitling the holders to the privileges of its biological laboratories. It provides for granting the degree of Bachelor of Science to students of the College who have had suitable preliminary education and who comply with the University regulations established for that degree. The courses of the first two years of the medical curriculum are offered at the University only.

LOCATION.

The College is situated on West Harrison street, between Hermitage avenue and Wood street, and can be reached by any of the trains of the Metropolitan Elevated Railway, the Marshfield avenue station of which is three blocks east of the College; by the Ogden avenue and Van Buren street electric lines, which cross Wood street two blocks north of the College; or by the Harrison street electric car line, which runs on West Harrison street.

The telephone number of the College is West-1113.

Address correspondence to

RUSH MEDICAL COLLEGE,
CHICAGO, ILLINOIS.

LOCATION OF THE UNIVERSITY OF CHICAGO.

The University is situated on the Midway Plaisance, between Ellis and Lexington avenues, and can be reached by the Cottage Grove avenue cable cars (from Wabash avenue), by the South Side Elevated Railway, by the Illinois Central Railroad to South Park Station, or by the Sixty-third street electric cars from the Englewood railway stations.

A Baggage Express Company and the Western Union Telegraph Company have offices at the University.

The telephone number of the University is Hyde Park-426.

CALENDAR OF RUSH MEDICAL COLLEGE.

1904

1905

June 16, Thursday	The Summer Quarter begins	Jan. 2, Monday	Winter Quarter begins
July 1, Friday	The fiscal year of the College begins	Jan. 2, Monday	Matriculation and Registration of new students
July 4, Monday	A holiday	Feb. 12, Saturday	Lincoln's Birthday—a holiday
July 25, Monday	Second Term, Summer Quarter begins	Feb. 13, Sunday	Second Term, Winter Quarter begins
Sept. 1, 2, Thursday, Friday	Quarterly Examinations	Feb. 22, Wednesday	Washington's Birthday—a holiday
Sept. 2, Friday	Summer Quarter ends	March 23, 24, 25, Thursday, Friday, Saturday,	Quarterly Examinations
Sept. 3-30	Summer Recess	March 25, Saturday	Winter Quarter ends
Sept. 16, 17, 19, 20, Friday, Saturday, Monday, Tuesday	Examinations for Admission	March 26-31	Quarterly Recess
Oct. 1, Saturday	Autumn Quarter begins	April 1, Saturday	Spring Quarter begins—Matriculation and Registration of new students
Nov. 14, Monday	Second Term, Autumn Quarter begins	May 8, Monday	Second Term, Spring Quarter
Nov. 24, Thursday	Thanksgiving Day—a holiday	May 30, Tuesday	Memorial Day—a holiday
Dec. 16, 17, 19, 20, Friday, Saturday, Monday, Tuesday	Examinations for Admission	June 8, 9, 10, Thursday, Friday, and Saturday	Quarterly Examinations
Dec. 20, 21, 22, Tuesday, Wednesday, Thursday	Quarterly Examinations	June 12, Monday	Special Clinics for the Alumni Association; Class-Day Exercises of the Graduating Class
Dec. 22, Thursday	Autumn Quarter ends	June 13, Tuesday	Special Clinics; Annual Business Meeting of the Alumni Association
Dec. 22-31	Quarterly Recess	June 14, Wednesday	Graduating Exercises
		3:00 P. M.	Annual Reception and Dinner of the Faculty and Alumni
		7:00 P. M.	Spring Quarter ends

CALENDAR OF THE UNIVERSITY OF CHICAGO.

THE MEETINGS OF THE BOARD OF TRUSTEES ARE HELD ON THE SECOND TUESDAY OF EACH MONTH.

1904					
June 12	Sunday	CONVOCATION SUNDAY.	Dec. 16	Friday	} WINTER EXAMINATIONS for admission to the <i>Junior Colleges</i> .
June 13	Monday	{ CLASS AND ALUMNI DAY. MATRICULATION and REGISTRATION of incoming students. SUMMER MEETING of the <i>University Congregation</i> .	Dec. 17	Saturday	
			Dec. 19	Monday	
			Dec. 20	Tuesday	
June 10	Friday	} SUMMER EXAMINATIONS for admission to the <i>Junior Colleges</i> .	Dec. 18	Sunday	CONVOCATION SUNDAY.
June 11	Saturday		Dec. 19	Monday	WINTER MEETING of the <i>University Congregation</i> .
June 13	Monday		Dec. 20	Tuesday	WINTER CONVOCATION of the <i>University</i> .
June 14	Tuesday		Dec. 20	Tuesday	} QUARTERLY EXAMINATIONS.
June 14	Tuesday	{ FOUNDER'S DAY. — SUMMER CONVOCATION of the <i>University</i> .	Dec. 21	Wednesday	
June 15	Wednesday	} QUARTERLY EXAMINATIONS.	Dec. 22	Thursday	
June 16	Thursday		Dec. 22	Thursday	
June 17	Friday		Dec. 23-31		QUARTERLY RECESS.
June 18	Saturday	FIRST TERM of Summer Quarter begins.	1905		
July 4	Monday	INDEPENDENCE DAY: a holiday.	Jan. 2	Monday	{ FIRST TERM of Winter Quarter begins. MATRICULATION and REGISTRATION of incoming students.
July 27	Wednesday	{ EXAMINATIONS for the First Term of the Summer Quarter. FIRST TERM of Summer Quarter ends. MATRICULATION and REGISTRATION of incoming students for the Second Term of Summer Quarter.	Feb. 10	Friday	FIRST TERM of Winter Quarter ends.
			Feb. 11	Saturday	SECOND TERM of Winter Quarter begins.
			Feb. 22	Wednesday	WASHINGTON'S BIRTHDAY: A Holiday.
			Feb. 23	Thursday	THE ANNUAL CONTEST in Oratory.
July 28	Thursday	SECOND TERM of Summer Quarter begins.	Mar. 1	Wednesday	LAST DAY for receiving applications for fellowships.
Aug. 2	Tuesday	} REGISTRATION of resident students for the Autumn Quarter.	Feb. 28	Tuesday	} REGISTRATION of resident students for the Spring Quarter.
Aug. 3	Wednesday		Mar. 1	Wednesday	
Aug. 4	Thursday		Mar. 2	Thursday	
Sept. 1	Thursday	{ EXAMINATIONS for Second Term of the Summer Quarter. AUTUMN MEETING of the <i>University Congregation</i> .	Mar. 3	Friday	
			Mar. 19	Sunday	CONVOCATION SUNDAY.
			Mar. 20	Monday	SPRING MEETING of the <i>University Congregation</i> .
Sept. 2	Friday	{ AUTUMN CONVOCATION of the <i>University</i> . SECOND TERM of Summer Quarter ends.	Mar. 21	Tuesday	{ SPRING CONVOCATION of the <i>University</i> . ANNUAL ASSIGNMENT of <i>Fellowships</i> .
Sept. 3-Sept. 30		SUMMER RECESS.	Mar. 22	Wednesday	} QUARTERLY EXAMINATIONS.
Sept. 16	Friday	} AUTUMN EXAMINATIONS for admission to the <i>Junior Colleges</i> .	Mar. 23	Thursday	
Sept. 17	Saturday		Mar. 24	Friday	
Sept. 19	Monday		Mar. 24	Friday	SECOND TERM of Winter Quarter ends
Sept. 20	Tuesday		Mar. 25-31		QUARTERLY RECESS.
Oct. 1	Saturday	{ FIRST TERM of Autumn Quarter begins. MATRICULATION and REGISTRATION of incoming students.	April 1	Saturday	{ FIRST TERM of Spring Quarter begins. MATRICULATION and REGISTRATION of incoming students.
Nov. 12	Saturday	FIRST TERM of Autumn Quarter ends.	May 12	Friday	FIRST TERM of Spring Quarter ends.
Nov. 14	Monday	SECOND TERM of Autumn Quarter begins.	May 13	Saturday	SECOND TERM of Spring Quarter begins.
Nov. 24	Thursday	THANKSGIVING DAY: a holiday.	May 30	Tuesday	MEMORIAL DAY: a holiday.
Nov. 29	Tuesday	} REGISTRATION of resident students for the Winter Quarter.	May 31	Wednesday	} REGISTRATION of resident students for the Summer and Autumn Quarters.
Nov. 30	Wednesday		June 1	Thursday	
Dec. 1	Thursday		June 2	Friday	
Dec. 2	Friday		June 3	Saturday	
Dec. 8	Thursday	THE ANNUAL DEBATE.	June 14	Wednesday	} QUARTERLY EXAMINATIONS.
			June 15	Thursday	
			June 16	Friday	

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 CHARLES H. PARKES, M.D., Assistant in Surgery, 51 Lincoln av.

ARTHUR ATWELL SMALL, M.D., M.R.C.S., L.R.C.P., Assistant in Medicine, 575 E. Division st.
 ALFRED D. KOHN, M.D., Assistant in Medicine, 103 State st.
 ALEXANDER C. SOPER, JR., M.D., Assistant in Medicine and in the Diseases of Children, 1632 Irving Park boul.
 MICHAEL LEO GALLAGHER, M.D., Assistant in Medicine, 5602 Cottage Grove av.
 WM. H. WALKER, M.D., Assistant in Medicine, 6309 Ingleside av.
 WALLACE F. GROSVENOR, M.D., Assistant in Obstetrics, and Gynecology 1156 Sheridan Rd.
 HUGO AD OLDENBORG, Assistant in Therapeutics, 92 State st.
 JAMES BURRIS MAHONY, M.D., Assistant in Therapeutics, 48th and Prairie av.
 CHARLES CLAUDE GUTHRIE, S.B., M.D., Assistant in Physiology, University of Chicago.
 JAMES MURRAY WASHBURN, B.S., M.D., Assistant in Medicine, 15 Bellevue pl.
 MOSES MILTON PORTIS, M.D., Assistant in Medicine, 34 Washington st.
 WALLACE CRAIG, A.B., Assistant in Zoölogy, University of Chicago.
 WILLIAM L. MCBRIDE, M.D., Assistant in Skin and Venereal Diseases, 100 State st.
 HERBERT GAMES VAUGHAN, M.D., Assistant in Chemistry, 410 N. Cuyler av., Oak Park.
 JOSEPHINE JACKSON, M.D., Assistant in the Diseases of the Chest, Throat, and Nose, 516 Fullerton av.
 ISAAC J. FRANKLIN, M.D., Assistant in the Diseases of Children, 293 W. Division st.
 JOSEPH C. FRIEDMAN, M.D., Assistant in Medicine, 4801 Indiana av.
 BATHENA COONE, M.D., Assistant in Nervous and Mental Diseases, 440 E. 57th st.
 R. E. GREEN, M.D., Assistant in Medicine, 550 Wilson av.
 A. C. McCLANAHAN, M.D., Assistant in Medicine, 160 Evanston av.
 JOSEPH H. OTRADOVEC, M.D., Assistant in Medicine, 7235 Union av.
 WM. R. STEPHENS, M.D., Assistant in Medicine, 1071 N. Clark st.
 W. R. TYNDALE, M.D., Assistant in Medicine, 6414 Woodlawn av.
 ROLLIN T. WOODYATT, M.D., Assistant in Medicine, 103 State st.
 CHARLES O. HOIBY, M.D., Assistant in the Diseases of Children, 242 Grand av.
 CHAS. A. WADE, M.D., Assistant in the Diseases of Children, 635 Jackson boul.
 CAROLINE HEDGER, M.D., Assistant in the Diseases of Children, 4638 Ashland av.
 O. M. STEFFENSON, M. D., Assistant in Nervous and Mental Diseases, 1298 W. Congress st.
 S. KRUMHOLZ, M.D., Assistant in Nervous and Mental Diseases, 287 W. 12th st.
 A. E. BERTLING, M.D., Assistant in Genito-Urinary Surgery, 477 S. Ashland av.
 J. F. GRASSE, M.D., Assistant in Genito-Urinary Surgery.
 ROBERT H. HERBST, M.D., Assistant in Genito-Urinary Surgery, 517 Dearborn av.
 D. P. JOHNSON, M.D., Assistant in Obstetrics, Rush Medical College.
 CAREY CULBERSON, M.D., Assistant in Obstetrics, 687 W. Monroe.
 F. I. BROWN, M.D., Assistant in Otology, 2340 N. 42d av.
 SAMUEL A. MATTHEWS, M.D., Assistant in Pharmacology, University of Chicago.
 HUGH McGUIGAN, S.B., Assistant in Physiological Chemistry, University of Chicago.
 EDITH E. BARNARD, S.B., Assistant in Quantitative Analysis, University of Chicago.
 JAMES LAWRIE, S.B., Lecture Assistant in Chemistry, University of Chicago.
 OSCAR ECKSTEIN, Sc.D., Research Assistant in Chemistry, University of Chicago.
 REUBEN MYRON STRONG, Assistant in Zoölogy (Summer Quarter, 1904), University of Chicago.
 MARY HEFFERMAN, Ph.D., Assistant and Curator of the Bacteriological Museum, University of Chicago.
 WALTER FULLER, Laboratory Inspector in Chemistry, University of Chicago.
 FRED RIESKE, Mechanical Assistant in Physiology, University of Chicago.
 THOR ROTHSTEIN, A.B., M.D., Research Assistant in Neuro-Pathology, University of Chicago.
 HENRY HIGGINS LANE, S.B., Laboratory Assistant in Zoölogy, University of Chicago.
 VICTOR EARNEST SHELFORD, B.S., Laboratory Assistant in Zoölogy, University of Chicago.
 OSCAR RIDDLE, B.S., Laboratory Assistant in Zoölogy, University of Chicago.
 JOHN WILLIAM SCOTT, A.M., Laboratory Assistant in Zoölogy (Summer Quarter, 1904), University of Chicago.
 WILLIAM JACOB BAUMGARTNER, A.M., Laboratory Assistant in Zoölogy (Summer Quarter, 1904), University of Chicago.
 JAMES FRANCIS ABBOTT, A.B., Laboratory Assistant in Zoölogy (Summer Quarter, 1904), University of Chicago.
 KATASHI TAKAHASHI, Technical Assistant in Neurology, University of Chicago.

WILFRED HAMILTON MANWARING, M.D., Assistant in Pathology (Summer Quarter, 1904), University of Chicago.
 RAGNHILD GULBRANSEN, Technical Assistant in Pathology, University of Chicago.
 JOHN LAURENCE JACQUE, M.D., Clinical Assistant in Diseases of the Chest, Throat, and Nose, 732 N. Leavitt st.
 CHARLES SHERMAN BRANNAN, A.B., M.D., Clinical Assistant in Diseases of the Chest, Throat, and Nose, 890 Clifton Park av.
 JOHN B. ELLIS, M.D., Clinical Assistant in Ophthalmology and Otolaryngology, 103 State st.
 DAVID FISKE, M.D., Clinical Assistant in Ophthalmology and Otolaryngology, 100 State st.
 JOHN CHARLES WEST, Clinical Assistant in the Diseases of Children.
 GRACE H. CAMPBELL, Clinical Assistant in the Diseases of Children, 838 W. Garfield boul.
 HANNAH LUELLA HUKILL, M.D., Clinical Assistant in Obstetrics and Gynecology, 103 State st.
 MARY O. B. PORTER, M.D., Clinical Assistant in Obstetrics and Gynecology, 1412 Jackson boul.
 I. RASMUSSEN, M.D., Clinical Assistant in Obstetrics and Gynecology, 372 W. Ohio st.
 T. W. LEWIS, M.D., Clinical Assistant in Diseases of the Chest, Throat, and Nose, 296 Winthrop av.
 ELMER L. KENYON, M.D., Clinical Assistant in Diseases of the Chest, Throat, and Nose, 34 Washington st.
 STANTON A. FRIEDBERG, M.D., Clinical Assistant in Diseases of the Chest, Throat, and Nose, 34 Washington st.
 LORENZO N. GROSVENOR, M.D., Clinical Assistant in Ophthalmology and Otolaryngology, 34 Washington st.
 MARIE SCHMIDT, M.D., Clinical Assistant in Obstetrics and Gynecology, 1601 W. 22d st.
 JOHN RITTER, M.D., Clinical Assistant in Diseases of the Chest, Throat, and Nose, 170 Colorado av.
 ROBERT HOSEA GOOD, M.D., Clinical Assistant in Ophthalmology, 265 Flournoy st.
 SARA F. JANSEN, M.D., Clinical Assistant in Skin and Venereal Diseases, 181 W. Madison st.
 JOSEPH WELFELD, M.D., Clinical Assistant in Skin and Venereal Diseases, 727 Grand av.
 LUDWIG M. LOEB, B.S., M.D., Fellow in Medicine, 100 State st.
 ALVIN MARTIN STOBBER, M.D., Fellow in Pathology, Rush Medical College.
 DAVID JOHN DAVIS, B.S., Fellow in Pathology, Rush Medical College.
 EDWARD PAUL FICK, M.D., Fellow in Chemistry, Rush Medical College.
 GUY CARSON KINNAMAN, M.D., Fellow in Surgery, Rush Medical College.

FELLOWS APPOINTED FOR 1904-1905. (IN THE MEDICAL DEPARTMENTS.)

GEORGE ALONZO ABBOTT, S.B., A.M., Chemistry.	WILLIS STOSE HILPERT, S.B., Chemistry.
FREDERICK MADISON ALLIN, A.B., Physiology.	LYNDS JONES, A.B., S.M., Zoölogy.
JOHN RAYMOND BARBER, A.B., M.D., Pathology.	EDWIN GARVEY KIRK, S.B., Anatomy.
WM. JACOB BAUMGARTNER, A.B., Zoölogy.	WILFRED HAMILTON MANWARING, Pathology.
WAYLAND BLAIR CLARK, S.B., S.M., Chemistry.	HORATIO HACKETT NEWMAN, A.B., Zoölogy.
DUDLEY WATSON DAY, S.B., Pathology.	STEPHEN WALTER RANSON, S.B., Neurology.
WILLIAM LLOYD EVANS, S.B., Chemistry.	HERMAN IRVING SCHLESINGER, S.B., Chemistry.
EMIL GOETTSCH, S.B., Anatomy.	GEORGE BERTRAND SMITH, S.B., Bacteriology.
HENRY MAX GOETTSCH, S.B., Chemistry.	THOMAS CALDEWARD STEPHENS, A.B., Zoölogy.
WALTER WILE HAMBURGER, S.B., Physiology.	ELIZABETH TOWLE, A.B., Physiology.

EXTRA-MURAL INSTRUCTORS.

At Cook County Hospital.

A. E. HALSTED, M.D., Assistant Clinical Professor (*extra-mural*) of Surgery.
 JOSEPHINE JACKSON, M.D., Clinical Instructor (*extra-mural*) in Diseases of the Chest, Nose, and Throat.

At West Side Hebrew Dispensary.

ROSA ENGELMAN, A.B., M.D., Assistant Clinical Professor (*extra-mural*) of Pædiatrics.
 ALBERT B. HALE, A.B., M.D., Assistant Clinical Professor (*extra-mural*) of Ophthalmology.
 SYDNEY KUH, M.D., Assistant Clinical Professor (*extra-mural*) of Neurology.
 GEORGE MORGENTHAU, M.D., Assistant Chemical Professor (*extra-mural*) of Diseases of the Throat, Nose, and Ear.
 EMANUEL FRIEND, M.D., Assistant Clinical Professor (*extra-mural*) of Surgery.
 LOUIS A. GREENSFELDER, M.D., Assistant Clinical Professor (*extra-mural*) of Surgery.
 A. W. SCHRAM, M.D., Clinical Instructor (*extra-mural*) in Medicine.
 MAY MICHAEL, M.D., Clinical Assistant (*extra-mural*) in Diseases of Children.
 FLETCHER L. STRAUSS, M.D., Clinical Assistant (*extra-mural*) in Diseases of the Eye.
 L. E. GORDON, M.D., Clinical Assistant (*extra-mural*) in Diseases of the Throat, Nose, and Ear.
 FRANK B. HARMISON, M.D., Clinical Assistant (*extra-mural*) in Medicine.
 WM. H. RUBOVITZ, M.D., Clinical Assistant (*extra-mural*) in Surgery.
 CHARLES J. SCHOENFELD, M.D., Clinical Assistant (*extra-mural*) in Surgery.

At Chicago Isolation Hospital.

HEMAN SPALDING, M.D., Assistant Clinical Professor (*extra-mural*) of Medicine.

At St. Luke's Hospital.

LEWIS L. MACARTHUR, M.D., Assistant Clinical Professor (*extra-mural*) of Surgery.

At Alexian Brothers' Hospital.

J. H. HOELSCHER, M.D., Assistant Clinical Professor (*extra-mural*) in Medicine.

MALCOLM L. HARRIS, M.D., Assistant Clinical Professor (*extra-mural*) in Surgery.

At St. Anthony's Hospital.

FRED J. E. EHLMANN, M.D., Clinical Instructor (*extra-mural*) in Medicine.

LAWRENCE RYAN, M.D., Assistant Clinical Professor (*extra-mural*) in Surgery.

JAMES H. HARPER, *Registrar.*

OFFICERS OF ADMINISTRATION.

AT THE UNIVERSITY OF CHICAGO.

The President of the University, WILLIAM RAINY HARPER, *Haskell Museum*, First Floor, Room 10.
 The University Recorder, ALONZO KETCHAM PARKER, *Haskell Museum*, First Floor, Room 11.
 The University Chaplain, CHARLES RICHMOND HENDERSON, *Cobb Lecture Hall*, Third Floor, Room 16.
 The University Registrar, THOMAS WAKEFIELD GOODSPEED, *Cobb Lecture Hall*, First Floor, Room 1.
 The Secretary to the President, HENRY P. CHANDLER, *Haskell Museum*, First Floor, Room 10.
 The Dean of Medical Students, JOHN MILTON DODSON, *Physiology Building*, First Floor, Room 13.
 The Dean in Medical Work for 1904-5, HOWARD T. RICKETTS, 1904-5, *Physiology Building*, First Floor, Room 13.
 The Dean of Women, MARION TALBOT, *Cobb Lecture Hall*, First Floor, Room 9.

THE ADMINISTRATIVE BOARD OF MEDICAL AFFAIRS.

AT THE UNIVERSITY OF CHICAGO.

THE PRESIDENT, *Chairman.*

THE RECORDER, *ex officio.* DEAN JOHN MILTON DODSON, *ex officio.* DEAN MARION TALBOT, *ex officio.*
 * DEAN HARRY GIDEON WELLS, *ex officio.* † DEAN HOWARD T. RICKETTS, *ex officio.*

PROFESSOR CHARLES OTIS WHITMAN.
 PROFESSOR ALBERT ABRAHAM MICHELSON.
 PROFESSOR CHARLES REID BARNES.
 PROFESSOR HENRY HERBERT DONALDSON.
 PROFESSOR GEORGE NEIL STEWART.
 PROFESSOR LUDVIG HEKTOEN.
 PROFESSOR JOHN ULRIC NEF.
 PROFESSOR LEWELLYS F. BARKER.
 PROFESSORIAL LECTURER NICHOLAS SENN.
 PROFESSORIAL LECTURER WALTER STANLEY HAINES.
 PROFESSORIAL LECTURER EPHRAIM FLETCHER INGALS.
 PROFESSORIAL LECTURER JAMES NEVINS HYDE.
 PROFESSORIAL LECTURER FRANK BILLINGS.
 PROFESSORIAL LECTURER ARTHUR DEAN BEVAN.
 PROFESSORIAL LECTURER JOHN CLARENCE WEBSTER.
 ASSOCIATE PROFESSOR JULIUS STIEGLITZ.
 ASSOCIATE PROFESSOR EDWIN OAKES JORDAN.
 ASSOCIATE PROFESSOR FRANK RATTRAY LILLIE.
 ASSISTANT PROFESSOR DAVID JUDSON LINGLE.

ASSISTANT PROFESSOR ROBERT RUSSELL BENSLEY
 ASSISTANT PROFESSOR ROBERT ANDREWS MILLIKAN.
 ASSISTANT PROFESSOR ALBERT PRESCOTT MATHEWS.
 ASSISTANT PROFESSOR HERBERT NEWBY MCCOY.
 ASSISTANT PROFESSOR JOSEPH EDWARD RAYCROFT.
 ASSISTANT PROFESSOR PRESTON KYES.
 DR. CHARLES MANNING CHILD.
 DR. BROWN PUSEY.
 MR. DANIEL GRAISBERRY REVELL.
 DR. LAUDER WILLIAM JONES.
 DR. GEORGE E. SHAMBAUGH.
 DR. JOHN C. HESSLER.
 MR. NORMAN MACLEOD HARRIS.
 DR. DEAN DEWITT LEWIS.
 MR. WILLIAM LAWRENCE TOWER.
 MR. JOHN GORDON WILSON.
 MR. BASIL COLEMAN HYATT HARVEY.
 DR. WILLIS B. HOLMES.
 MR. BENSON AMBROSE COHOE.
 DR. BURTON JESSE SIMPSON.

* Absent on leave, 1904-5.

† Appointed for 1904-5.

INTRODUCTORY STATEMENT.

THE CURRICULUM.—The curriculum of Rush Medical College, extending over four annual sessions of nine months (three Quarters) each, embraces (1) two years of work in the fundamental branches of Anatomy, both gross and microscopic, Neurology, Embryology, Physiology, Physiological Chemistry, Pharmacology, Bacteriology and Pathology, and (2) two years in the clinical branches of *Materia Medica*, Therapeutics, Clinical Pathology, Medicine, Surgery, Obstetrics, and the special lines of practice.

FUNDAMENTAL BRANCHES AT THE UNIVERSITY OF CHICAGO.—The courses in the fundamental branches are offered only at the University of Chicago, in the spacious Hull Biological laboratories, by instructors whose time is wholly devoted to teaching and investigation in their respective lines. It is believed that the student pursuing these studies in the atmosphere of an institution devoted to scientific work, cannot but gain a broader and more thorough conception of these sciences. Such a training will not only afford a better preparation for the clinical courses of the Medical College and for the practice of medicine and surgery, but will also enable the student to follow more easily in paths along which medical advances promise to be made, and to apply these new discoveries in his daily work.

THE CLINICAL BRANCHES are taught at Rush Medical College, with its Central Free Dispensary and the Presbyterian Hospital, and in the Cook County Hospital, the West Side Hebrew Dispensary, and other hospitals in the vicinity of the college.

THE REQUIREMENTS FOR ADMISSION comprise (a) the completion of a four-year high-school course, and, in addition, (b) two years of work in a recognized college or university. This work must have included a thorough course in College Chemistry, both inorganic and organic, a course in College Physics, with laboratory work, and a course in general Biology, with laboratory work. Until the beginning of the Summer Quarter, 1905, thirteen Majors of work will be accepted in lieu of the two years of College study, if they be taken in the University of Chicago in specified branches. After June, 1905, a reading knowledge of German and of French will be required, in addition to the above. (See p. 18.)

It is the firm conviction of the faculty that, under the conditions now prevailing in the practice of medicine, and which are rapidly becoming more exacting, no person can afford to enter upon the study of medicine with a preparation less thorough and comprehensive than that demanded by these requirements.

ADMISSION TO ADVANCED STANDING.—(a) Students or graduates of other medical colleges whose work is recognized by this College, may be admitted to advanced standing. They are required to present credentials showing that their preparatory education was fully equivalent to that demanded of the students of Rush Medical College, in the class which they wish to enter; they must have spent an amount of time, estimated in months, and have completed work in the medical branches equal to that demanded of students in this College. Any deficiencies may be made up by attendance upon extra quarters or, in small degree, by extra work. (See p. 18.)

(b) Graduates of a recognized college of arts or science, holding a bachelor's degree, who have completed work in the medical sciences corresponding to any of the work of the medical curriculum, may be given credit for such work and are allowed to complete the course for the degree of M.D. in thirty-three months from the date of matriculation. (See p. 18.) Their deficiencies may be made up by attendance upon extra Quarters during this period.

REQUIREMENTS FOR GRADUATION.—The Requirements for Graduation comprise attendance upon four sessions of three Quarters (nine months) each, the completion of a prescribed amount of work, and the passing of certain examinations both written and practical. (See p. 19.)

THE COMBINED COURSE FOR THE DEGREES OF M.D., AND S.B., A.B., OR PH.B.—Attention is called to the fact that courses are offered in the University of Chicago, in the departments of Arts, Literature, and Science, in all of the branches of a liberal education. The work of the Senior College (Junior and Senior years of the University) being almost wholly elective, a student seeking a bachelor's degree may elect courses in Anatomy, Physiology, etc., and thus procure such a degree together with that of M.D., in from six to six and one-half years. This plan admits of great elasticity in adjustment to the needs of the individual students as one may spend anywhere from six to twelve Quarters or more in preparatory college work before taking up the study of the medical branches. Every student is

urged to make his preparatory work as extensive and thorough as his age and other circumstances will permit. (See pp. 25-26.)

THE ELECTIVE SYSTEM.—The work of the first two years of the medical curriculum is in part, and that of the last two years, wholly elective, the choice of the student for each Quarter being subject to certain restrictions. (See p. 27.)

THE QUARTER SYSTEM.—The College is in session during four Quarters each year and a student may enter at the beginning of any Quarter. Students beginning their medical work, however, are advised to commence with the Autumn Quarter. (See p. 27.)

THE TUITION FEE is sixty dollars per Quarter or one hundred and eighty dollars for each of the four annual sessions, this tuition including all laboratory fees. (See pp. 20-23.)

STUDENT SELF HELP.—Many opportunities are afforded in Chicago for students to earn a portion (and in exceptional cases the whole) of their expenses. A booklet giving fuller information in regard to this matter will be mailed on application.

LABORATORIES, EQUIPMENT, AND LIBRARIES.

THE HULL BIOLOGICAL LABORATORIES.

On December 14, 1895, Miss Helen Culver, of the city of Chicago, presented the University of Chicago with property valued at \$1,000,000—the whole gift, according to the terms of the letter of endowment, to be devoted to the increase and spread of knowledge within the field of the biological sciences. From this fund there have been erected, at the north end of the University grounds, four buildings to serve as laboratories for the Anatomical, Botanical, Physiological, and Zoölogical Sciences. Medical instruction is given in the Anatomical Physiological, and Zoölogical Laboratories.

THE ANATOMICAL LABORATORY.

The Anatomical Laboratory is 120 by 50 feet, and four stories high, exclusive of the basement and attic, and was constructed to provide for Anatomy, both gross and microscopic, including Neurology.

In the basement are special rooms for keeping frogs and similar animals at low temperatures; a bone room, a cold storage room for anatomical material and a crematory.

The first floor is occupied by three large laboratories for microscopic work (Histology, Microscopic Anatomy, Neurology, and Pathology), and a large photographic room containing a stone pier and connected with a dark room. On the second floor there is an additional room for general class work in microscopic branches, a lecture room, and an Osteological Laboratory. Here, too, are located the laboratories of the staff in Neurology and a laboratory for advanced work and original research in

Neurology. On the third and fourth floors are situated the dissecting rooms for Human Anatomy, the private laboratories for instructors and research workers, and two laboratories for the making of special preparations. In the attic there is a well-lighted operating room adjoining a large animal room; in addition several storerooms are situated here. The laboratories are well equipped for work in gross and microscopic Anatomy and in Pathology, and especial facilities are afforded for advanced work and original research.

THE PHYSIOLOGICAL LABORATORY.

The Physiological Laboratory is 102 by 52 feet and four stories high, exclusive of the basement and attic. The basement contains a cold storage room, aquarium room, an animal room, dark room, and store-rooms. It is connected with the greenhouse of the laboratory. The first floor contains general laboratories for beginners, a shop, a storeroom, a lecture room, and photographic room. The second floor contains a large lecture room with preparation room and storeroom, the departmental library, an optical room, two dark rooms, and a private laboratory. The third floor contains two laboratories for advanced workers in Physiology, a laboratory for beginners in Physiological Chemistry and Pharmacology, a balance room, and several smaller rooms for work in Physiological Chemistry and Pharmacology. The fourth floor contains two rooms with cages for animals and two operating rooms. In addition, two laboratories for work in Physiological Chemistry and Pharmacology, a combus-

tion room, and a room for work in gas analysis. The laboratories are well equipped both for general instruction in Physiology, Physiological Chemistry, and Pharmacology, and for advanced and research work in these sciences.

THE ZOÖLOGICAL LABORATORY.

The Zoölogical Laboratory is 120 by 50 feet, and four stories high, exclusive of the basement.

On the first floor are located the library of the biological departments, a synoptical museum, a large laboratory for elementary Zoölogy, and a laboratory for research work in Pathology. The second floor contains one large laboratory for beginners in research, and a number of smaller laboratories for more advanced work. The third floor contains three large laboratories, for comparative anatomy and embryology, and a number of

rooms for research. The fourth floor is devoted to the laboratories for Bacteriology, which are supplied with sterilizers, incubators, special microscopes, and other bacteriological apparatus, and are furnished with tables for microscopical work and for the usual laboratory manipulations. The basement contains one large room with glass-covered extension on the south side, designed for an aquarium, two rooms for use as aviaries, vivaria, etc., one room for palæontological material, and one for taxidermy and museum purposes.

The best optical and other apparatus demanded by zoölogical work are provided. There are series of models and charts illustrating embryological and morphological subjects, and ample facilities for keeping land and aquatic animals under favorable conditions for study.

THE KENT CHEMICAL LABORATORY.

The Chemical Laboratory was provided by the generosity of Mr. Sidney A. Kent, is 176 by 64 feet and is three stories high exclusive of the basement. An amphitheater seating 750 people forms an annex to the building. Lectures are given in rooms on the first floor. The laboratory instruction in General Inorganic and Elementary Organic Chemistry is given on the third floor in three large laboratories accommodating 300 students. Each student is given a separate desk supplied with gas and water and is furnished with all neces-

sary chemicals and apparatus. The laboratories for analytical chemistry are on the second and third floors. The advanced work in Chemistry is done in general and private laboratories on the first and second floors. There are a number of small rooms used as balance, combustion, gas-analysis, photographic rooms, etc. The Chemical Library contains full sets of the most important journals, books of reference, and other works relating to Chemistry.

THE LIBRARIES.

The General Library is located on the corner of Fifty-eighth street and Ellis avenue. The building now occupied is temporary and is to be used until such time as a permanent library building may be erected.

The general Library is for the use of students in all departments of the University. Students who have matriculated may take at one time three volumes from the General Library. These may be kept two weeks, and at the end of that time, if desired, may be renewed for two weeks.

Former students may continue the use of the library by the payment of the library fee of \$2.50 per Quarter.

The total number of books at present in the library is approximately 372,816.

Number of volumes in departmental libraries of departments concerned in medical instruction, January 1, 1903: Biology, including Anatomy, Neurology, Physiology, Bacteriology, Pathology, Zoölogy, Physiological Chemistry, and Pharmacology, 12,878, Chemistry, 2,039, Physics, 1,758.

All the branch and departmental libraries are catalogued and classified. Most of the collections in the General Library are now permanently arranged.

The General Library is open on every week-day from 8:30 A. M. to 5:30 P. M. The Library receives 1,287 current periodical publications, including the transactions and proceedings of learned societies; the foreign serials alone numbering not less than 674. The Departmental Libraries are closed at 6 P. M., and are not open during the evening except to those to whom special permission has been granted by the departmental adviser.

The students of the University are permitted to use the books and periodicals in the Newberry Library and in the Crerar Library, both of which contain a large number of medical and general scientific works.

The Public Library of Chicago is also available to medical students for general reading.

BUILDINGS, EQUIPMENT, AND HOSPITAL FACILITIES AT RUSH MEDICAL COLLEGE.

The Clinical Building, situated upon the corner of West Harrison and Wood streets, is 60×80 feet, and four stories in height. The first floor is occupied by the college library and reading-room. On the second floor are situated the offices of the college, the lower amphitheater, seating 400, and clinical waiting rooms. The third floor contains the upper amphitheater, seating 530 persons, a large surgical examining and dressing room, five clinical examining rooms, and a waiting room for patients. The fourth floor is occupied in part by the upper amphitheater, and in part by the laboratory for surgical and orthopedic appliances and bandaging.

Senn Hall, now completed, through the munificence of Professor Senn and other members of the Faculty, adjoins the Clinical Building on the east. It covers a ground space of 40×90 feet, is seven stories in height (including the basement), and of absolutely fire proof construction. The basement and first three floors, affording over 10,000 square feet of floor space, is devoted to the dispensary and the clinical teaching connected therewith. The fourth and fifth floors are occupied by clinical laboratories and recitation rooms. The remaining two stories contain two surgical and medical amphitheaters, seating about 150 each, with necessary waiting and preparation rooms.

The Laboratory Building, on the south side of Harrison street, is 100×45 feet in area, and six stories in height (including the basement). The basement is occupied by storage rooms for apparatus, an animal room for the laboratory of Pathology and Bacteriology, and a cloak-room for students. Adjoining the basement is a separate building for the preparation and storage of cadavers, by the cold storage process, with a capacity for about 200 bodies. The first and second stories are devoted to the Department of Pathology and Bacteriology, which is fully equipped with the necessary microscopes and other apparatus for advanced work in these branches. The third floor is occupied by the Department of Chemistry and Toxicology, and is supplied with all of the necessary apparatus and materials for advanced work in these branches in their relation to practical medicine.

The fourth floor contains four recitations room and a laboratory for Pharmacy and Therapeutics. The fifth floor is devoted to advanced work in practical gross Anatomy, and to Operative Surgery.

The Presbyterian Hospital, with accommodations for 250 patients, adjoins the college, and is connected with it, so that patients can be transferred directly from the wards to the clinical amphitheaters. In this hospital over 2,000 patients are treated annually, and it thus affords a large amount of valuable material for the clinics.

In the Cook County Hospital, which is situated opposite the college, are treated about 20,000 patients annually. In this institution are given about forty clinics a week, including all varieties of medical and surgical cases. The facilities for the study of pathology which are afforded at the Cook County Hospital are unexcelled in this country. Between 300 and 400 post-mortems are made annually in the necropsy theater by Professor Hektoen and the other Pathologists of the Hospital.

The Library and Reading Room, which has heretofore occupied the fourth floor in the Chicago College of Dental Surgery, has been transferred to the first floor of the clinical building, which adds to the convenience of students. The library contains about 13,000 volumes, and files of all the leading medical journals in English, German, and French.

Through the courtesy of the medical attendants and managing officers of several hospitals and dispensaries within convenient distance of the College, *extra-mural* clinical courses are offered to the students of Rush, in small groups, and the clinical material available for teaching has thus been greatly augmented. Such courses are offered at the West Side Hebrew Dispensary, treating about 30,000 cases annually; at the St. Luke's Hospital with about 2,000 cases annually; at the Illinois Charitable Eye and Ear Infirmary, treating about 1,000 cases, and at the Chicago Isolation Hospital, where about 250 cases of smallpox were received during the past year; at St. Anthony's Hospital, with about 100 beds, and at the Alexian Brothers' Hospital with about 200 beds.

REQUIREMENTS FOR ADMISSION.

THE REQUIREMENTS FOR ADMISSION TO RUSH MEDICAL COLLEGE, ARE, BRIEFLY, 1) THE COMPLETION OF A FOUR YEAR HIGH SCHOOL COURSE, AND 2) THE COMPLETION OF TWO YEARS OF WORK IN A RECOGNIZED COLLEGE OR UNIVERSITY. THE COLLEGE WORK MUST HAVE INCLUDED a) ONE YEAR OF COLLEGE CHEMISTRY, BOTH INORGANIC AND ORGANIC, IN ADDITION TO ONE YEAR OF HIGH SCHOOL CHEMISTRY; b) A COURSE IN COLLEGE PHYSICS, WITH LABORATORY WORK, IN ADDITION TO ONE YEAR OF HIGH SCHOOL PHYSICS; and c) A COURSE IN GENERAL BIOLOGY, INCLUDING LABORATORY WORK.

GENERAL REGULATIONS..

Students are admitted to the Medical Courses either as 1) *Medical Students*, or 2) *Undergraduate Students* (candidates for a bachelor's degree, S.B., A.B., or Ph.B.). 3) *Graduates* of the University of Chicago or of other universities or colleges of good standing are admitted to the Medical Course as Medical Students; they are allowed all the privileges of the members of the Graduate Schools of the University. 4) In addition to students in regular standing, provision is made for the admission to the University of undergraduate students not seeking degrees. Such students are known as *Unclassified Students*. They may register for medical subjects, but they are not candidates for the M.D. degree until they have fulfilled the requirements for admission.

1. *Admission as a Medical Student.*

- a) Each student must present to the faculty certificates of good moral character, signed by at least two physicians of good standing in the state in which the applicant last resided.
- b) He must be able to comply with the requirements for admission to the Medical Courses of the University of Chicago (see p. 16).
- c) He will matriculate and register as a student of Rush Medical College as well as of the University at the beginning of his course. Such matriculation and registration is accomplished at the University without extra fee.

2. *Admission as an Undergraduate Student* (as a candidate for a Bachelor's degree).

- a) The first two year's work in Medicine may be taken as the third and fourth years of the Bachelor of Science courses upon fulfillment of certain requirements for the degree (see p. 25).

A very considerable part of the first two years' work in Medicine may also be taken during the third and fourth years of the Bachelor of Arts or the Bachelor of Philosophy courses (see p. 25).

Students who wish to enter College and prepare to take the Medical work as a part of their Baccalaureate course may enter at the beginning of the Junior College Course (first college year) or at any further stage of advancement.*

- b) Each student must present to the Faculty certificates of good moral character signed by at least two physicians of good standing in the state in which the applicant last resided.
- c) In order to comply with the rules of the Medical Examining Boards of several states a student will matriculate with the Dean of Rush Medical College (at the University) at the beginning of his work in medicine. He will consult with the Dean of Medical students each Quarter in regard to his work, and take a card of advice to the Dean of Senior Colleges, with whom the student will continue to register until he receives a Bachelor's degree. Credit will not be given toward the M.D. degree unless the student complies with this regulation.

3. *Admission as a Graduate Student.*

- a) Admission to the Graduate Schools of the University is granted (1) to those who have been graduated from the colleges of the University of Chicago with the degree A.B., Ph.B., or S.B.; (2) to those holding baccalaureate degrees from other institutions of good standing.
- b) Applications for admission in the case of students not graduates of the University should be accompanied by testimonials as to character and scholarship. Such testimonials should take the form of diplomas, written or printed theses, or satisfactory evidence in some other form of the student's fitness for admission.
- c) *A Graduate Student taking the Medical Course must comply with 1a) and 1c). He will consult each Quarter with the Dean of Medical Students, and will take a card of advice from him to the Dean of the Grad-*

*A student desiring to enter the course as a candidate for the S.B., A.B., or Ph.B., degree is requested to consult p. 25 of this ANNOUNCEMENT where a complete statement is given of the requirements for the college degrees and of the conditions for admission to advanced standing in the colleges. He is also invited to enter into correspondence upon the subject with the Dean of the Senior Colleges, the University of Chicago Chicago Ill.

uate School, with whom the student will register. Credit will not be given toward the M.D. degree unless the student complies with this regulation.

- d) Advanced standing in the Medical Course is granted for work done in other colleges or medical schools according to the conditions stated on p. 18 of this ANNOUNCEMENT.

4. *Unclassified Students.*

- a) Candidates for admission to the University as *Unclassified Students* (1) must be at least 21 years of age; (2) must show good reason for not entering upon a regular course; (3) must take the entrance examina-

tions of the departments in which they wish to work; (4) must satisfy the Dean and the particular instructors under whom they desire to study that they are prepared to carry the courses elected.

Unclassified students conform to all regulations of the University, and, having been admitted, their continuance depends on the maintenance of a satisfactory standing.

Note.—Students entering the University for the first time should make it a point to complete all arrangements for entrance, either by correspondence or in person, at least two days before the opening of the Quarter.

REQUIREMENTS FOR ADMISSION TO THE MEDICAL COURSES.

These comprise a) the successful completion of a four years' high-school or academy course, qualifying the student to enter the Junior College (Freshman class) of the University of Chicago,* and b) 18 Majors (=6 Quarters) of the usual college course or a full equivalent therefor. (See p. 17, col. 2, B, for details.)

A. HIGH SCHOOL WORK REQUIRED FOR ADMISSION.

The high-school course must have included at least 2 units† of Latin (Cæsar and Elementary Grammar); 4 units of English (Rhetoric, Composition, and Literature); 2½ units of Mathematics (Algebra through Quadratics and Plane Geometry), 1 unit of History; 1 unit of Physics (including laboratory work), 1 unit of Chemistry (including laboratory work and 3½ units in any of the other studies usually included in a high-school curriculum. A diploma is not accepted as sufficient evidence of such preparation, but specific statement is required as to the amount and character of the work in each branch of study. *Blanks are furnished by the University for the presentation of such credits, and will be mailed on application to the Dean of Medical Students.*

Such credits are accepted without examination from affiliated or co-operating schools (see list below), also from the accredited schools of certain State Universities (see list below). Students from schools not recognized by the University must submit to examination in the branches required.

i. *Times and Places of Examinations.* Examinations for admission are held twice a year at the University. (For dates see the calendar, p. 4.) They are also given at the request of students or teachers at

any of the regular dates, in cities outside of Chicago in which satisfactory arrangements can be made. Applications or such examinations should be made to the Dean of Affiliations at least 30 days in advance. Examinations for admission at other than the regular dates may be given only at the University and that by special permission of the Dean, and upon the payment of a fee of not less than \$10.00 nor more than \$15.00 (the amount being dependent on the number of examinations taken).

Candidates for admission are not required to take all the examinations at one time.

2. *Fee for Examination for Admission.* A fee of \$5.00 is charged for examination for admission. This is paid when the first examination is taken. The same fee is paid by students entering upon certificate from co-operating schools.

3. *Students from Morgan Park Academy, the University High School* (the South Side Academy and the Chicago Manual Training School combined), *and the Affiliated and Co-operating Schools* (see Nos. 4 and 5) are admitted to the University upon presentation of a *subject certificate* covering each of the subjects stated above as required for admission.

4. *Affiliated Schools.* The following is the list of affiliated schools doing preparatory work:

Bradley Polytechnic Institute, Peoria, Ill.; Culver Military Academy, Culver, Ind.; Frances Shimer Academy, Mt. Carroll, Ill.; Harvard School, Kenwood Institute, Dearborn Seminary, the University School for Girls, all of Chicago; Rugby School, Kenilworth, Ill.; Wayland Academy, Beaver Dam, Wis.

* A complete and more detailed statement of the requirements and the ground covered by each subject will be sent to any principal teacher, or student on application to the Dean of Medical Students.

† A unit corresponds to a daily recitation throughout the school year of thirty-six weeks.

5. *Co-operating Schools.* The following is the list of co-operating secondary schools:*

The High Schools of Chicago, viz.: Austin, Calumet, Englewood, English High and Manual Training, Hyde Park, Jefferson, John Marshall, Joseph Medill, Lake, Lake View, Robert Waller, Northwest Division, South Chicago, South Division, William McKinley, the University School for Boys.

Other High Schools in Illinois: Atlanta (excepting Physics), Aurora (East Side), Aurora (West Side), Bloomington, Blue Island, Clyde, Danville (excepting Chemistry), De Kalb, Dixon (South Side), Dixon (North Side; approved for Mathematics, Latin and Chemistry), East St. Louis (excepting Chemistry), Elgin, Evanston Township, Ferry Hall Seminary (Lake Forest), Freeport, Geneseo, Harvey, Highland Park, Hinsdale, Joliet, La Salle, Lincoln (excepting Chemistry), Lyons Township, Mattoon, Mendota (Blackstone), Moline, Morrison (excepting Chemistry), New Trier Township, (excepting Chemistry), Oak Park, Ottawa Township, Peoria, Pontiac (excepting Physics and Chemistry), Polo (excepting Chemistry), Princeton, Quincy, Riverside, Rockford, Rock Island, Springfield, Sterling, Sycamore, Tuscola, Waukegan, and Wheaton.

In California: San Francisco Girls' and Lowell High Schools.

In Colorado: Colorado, Springs, Denver, West Denver, and Pueblo (Central and Centennial) High Schools.

In Indiana: Anderson, Auburn, Elkhart, Fort Wayne, High School Frankfort, Goshen, Indianapolis High School, Indianapolis Industrial Training School, Classical School for Girls (Indianapolis), Lafayette (excepting Physics), La Porte, Logansport, Michigan City, Muncie, South Bend, Terre Haute, Richmond, and Warsaw High Schools.

In Iowa: Des Moines (West Side), Dubuque, Glenwood, Keokuk, Red Oak (excepting Chemistry), Sioux City, Clinton, Cedar Rapids, Ottumwa, and Council Bluffs High Schools.

In Kansas: Leavenworth, Fort Scott, and Topeka High Schools.

In Kentucky: Boys' High School and Girls' High School, Louisville.

In Maine: Coburn Classical Institute (Waterville).

In Michigan: Michigan Military Academy (Orchard Lake), Battle Creek, Bay City, Detroit (Central; excepting Chemistry), Detroit, (Eastern) Detroit Home and Day School, Grand Rapids (Central).

Saginaw, St. Joseph, and Benton Harbor High Schools.

In Minnesota: Duluth (Central), Minneapolis Central and East Side High Schools, and St. Mary's Hall and Shattuck School, Faribault, St. Paul (Central, Humbolt Park and Cleveland).

In Missouri: Blee Military Academy (Macon), Hosmer Hall (St. Louis), St. Louis, Kansas City (High and Manual Training Schools, and Westport), St. Joseph.

In Montana: Helena.

In Nebraska: Omaha High School; Brownell Hall, Omaha.

In New York: Masten Park High School, Buffalo.

In Ohio: Akron, Canton, Cleveland (Central, East, Lincoln, South); Columbus (Central, North, and East), Toledo (Central), Dayton (Steele High School), Findlay, Sandusky and Youngstown High Schools.

In Pennsylvania: Pittsburgh Central High School and Westtown Boarding School.

In Texas: Dallas (excepting Chemistry), Denison (excepting Physics and Chemistry), Ft. Worth (excepting Chemistry), Galveston, Houston, San Antonio, Sherman (excepting English).

In Wisconsin: Appleton, Carroll College (Waukesha), Fond du Lac (excepting Chemistry), Milwaukee (S. E. and W. Side), Racine, and Waukesha High Schools, Milwaukee Downer College, Milwaukee and Hillside Home School, Sheboygan.

6. *Accredited Schools of Certain State Universities.* For the year, beginning June 16, 1904, credits from the following schools, in addition to the foregoing list, will be accepted for admission to the Medical Course of the University: Four-year High Schools and Academies on the accredited lists of the following universities: the University of Wisconsin, the University of Michigan, the University of Minnesota, the University of Iowa, the University of Illinois, the University of Nebraska, the University of Kansas, the University of Indiana, and the University of Ohio.

B. COLLEGE WORK REQUIRED FOR ADMISSION.

For the year beginning June 16, 1904, there will be demanded, in addition to the requirements for admission to the Junior College (Freshman class), two years of college work. In lieu of these two years, thirteen Majors will be accepted if taken at the University in the branches which especially prepare one for the study of Medicine (see pp. 25,

* In the case of certain schools one or more subjects have been excepted. Graduates from such schools will be credited with these subjects on passing the entrance examinations therein.

26). Three Majors of college chemistry (including one Major of organic chemistry) in addition to one year of high-school chemistry, a thorough course in elementary biology, with laboratory work, and one Major of college physics, must have been taken. This preparation may be accomplished at the University of Chicago in four Quarters. For the student entering this year, therefore, with only a high-school diploma, the medical course may be considered as consisting of about five and one-half years' work. But by working one or more Summer Quarters this time can be reduced.

From the beginning of the Summer Quarter, 1905, eighteen Majors of college work will be required, all of which must have been in the branches specified, and the student must possess, in addition to the courses mentioned in the two preceding paragraphs, a reading knowledge of German and of French.

See p. 25 of this ANNOUNCEMENT for the two years' course of college studies recommended for students preparing to study medicine.

Attention is called to the fact that the extra credits which will be required in addition to high-school work may be secured in the Colleges of Arts, Literature, and Science of the University of Chicago by attendance during extra quarters before entering the medical course or, in small part, by taking extra work in these colleges during the student's attendance upon the medical course. A student may qualify for admission to the medical course by prolonging his attendance or taking extra work in the University. Credit will be accepted for such work in any other college or university of equal standing.

Applicants for admission to advanced standing in the courses for the degrees of A.B., Ph.B., or B.S., University of Chicago, should apply to the University for the *Circular of Information* of the Colleges.

ADMISSION TO ADVANCED STANDING.

Students are admitted to advanced standing in the Medical Courses as follows:

First. Students from other medical schools whose standards are fully equivalent to those of this institution may receive credit for time spent—estimated in months—and for work successfully completed in such institutions provided it is equivalent to corresponding work in the medical course in the University. Such a student should give an explicit statement in regard to his preliminary education before beginning the study of medicine, the date of beginning and ending of each session attended in a medical college, together with the name of the college and a statement of the studies which he has successfully completed, this latter statement setting forth, if possible, the exact number of hours given to each subject. The credit claimed in each branch must be passed upon by the head of the corresponding department at the University.

Second. Graduates of recognized Colleges of Arts or Science which require a regular attendance of four years as essential to graduation may be given credit for each Major of work (or a full equivalent therefor) correspond-

ing to any of the work in medical courses. *A Major corresponds to sixty hours of didactic or recitation work, or one hundred and twenty hours of laboratory work, or of lectures and laboratory work in the given proportion.* Students of this class applying for advanced standing should state fully the date of the beginning and ending of each session attended at a university or college, together with the name of such university or college, and a statement of all the work taken in any of the following branches: German, French, Chemistry, Physics, and any of the Biological branches. The credit claimed in each branch must be passed upon by the head of the corresponding department at the University. In accordance with state law such students are allowed to complete their medical course and receive the M.D. degree in not less than thirty-three months after the date of matriculation as medical students. This is equivalent to a time credit of one year, but does not excuse the student from any of the work of the medical course.

Application Blanks. Blanks for presenting these credits will be furnished on application to the Dean of Medical Students. A student may matriculate at any time in person or by correspondence.

REQUIREMENTS FOR GRADUATION.

The following are the requirements for the degree of Doctor of Medicine:

The candidate must not be less than twenty-one years of age, and must have studied medicine for four years. He must have paid all dues, must have complied with all the requirements, and must have maintained unexceptional conduct while at the College.

He must have attended twelve full Quarters or an equivalent amount of time in a recognized medical school, of which at least the last three Quarters must have been in this institution, and forty-five months must have elapsed between the beginning of his first course of medical lectures and the date of his graduation.

He must have completed, successfully, all of the work required, as follows:

Eighteen Majors of work in the Freshman and Sophomore years, comprising a minimum of 6 Majors in the departments of Anatomy and Neurology, and the subdepartment of Embryology, including gross and microscopic Anatomy, Human Dissection (one lateral half of the human body), Neurology, and Embryology; 5 Majors in Physiology, in which is included the subdepartment of Physiological Chemistry; 1 Major in Pharmacology; 3 Majors in Pathology, including Bacteriology; 3 Majors

additional work in one or more of these departments of his choice.

He may be required to pass a final examination in 1) Anatomy (including Embryology and Neurology), 2) Physiology (including Physiological Chemistry and Pharmacology, and 3) Pathology (including Bacteriology).

Twenty-one Majors of work in the Junior and Senior years, comprising a minimum of 1½ Majors in Therapeutics and Preventive Medicine; 1 Major in Pathology; 4 Majors in Medicine; 5 Majors in Surgery; 3 Majors in Obstetrics and Gynecology; 1½ Majors in Diseases of the Chest, Throat, and Nose; ½ Major in Diseases of the Eye and Ear; ½ Major in Skin and Venereal Diseases; 4 additional Majors in any branch or branches of his choice.

He must have passed successfully, a final examination, both written and practical, in 1) Medicine; 2) Surgery; 3) Obstetrics; and 4) one of the following branches of his choice a) Gynecology, b) Diseases of the Chest, Throat, and Nose, c) Ophthalmology and Otology, or d) Skin and Venereal Diseases.

He must attend the graduating exercises and receive his diploma in person unless excused for cause by special action of the faculty.

GENERAL INFORMATION FOR STUDENTS ENTERING THE FRESHMAN AND SOPHOMORE CLASSES AT RUSH MEDICAL COLLEGE

ROUTINE OF ENTRANCE.

I. CREDENTIALS.

Applications should be addressed to THE UNIVERSITY OF CHICAGO, or to RUSH MEDICAL COLLEGE, Chicago, Ill. When presenting himself for admission to the University, the student should bring his *card of admission credits* if he is entering a Junior College at its beginning; his *letter of dismissal* and an official statement concerning his previous work if he is entering with advanced standing from another institution; and a *diploma* if he is applying for admission to a Graduate School.

These documents should be presented at the office of the Dean of Medical Students, Room 13, Physiology Building, at the University. Detailed directions will be furnished in the dean's office as to the mode of registering for courses of instruction desired.

II. MATRICULATION AND REGISTRATION.

1. TIME OF REGISTRATION.

- a) Students entering the University *for the first time*, or resuming work after absence for a Quarter, will register for the Autumn and Winter Quarters on or before the last day of September or the first and second days of October; and for the Spring and Summer Quarters on or before the last day of March or on the first day of April.

2. ORDER OF PROCEDURE FOR NEW STUDENTS.

New students will

- a) In case they come from a secondary school present credentials to the Dean of Affiliations and secure a card of admission credits. Those entering from colleges submit credentials to the Dean in charge of advanced standing. This may be done by correspon-

dence. New students are urged to send their credentials to the Dean at least two days before they come to register.

- b) *Matriculate* in the office of the Dean of Medical Students, where a card of instructions will be given him. Matriculation is granted on presentation of the card of admission-credits which entitle the student to enter the University. As evidence of admission the student is given a *Matriculation card*. This should be retained under all circumstances, as it must be shown at each time of registration, and whenever membership in the University is to be demonstrated.
- c) *Register*, in the same office, the courses of study desired for the ensuing Quarter. For this purpose the student will be given a *Registration card* for the Quarter and, after consultation with the Dean, the courses desired will be entered on this card.

In order that a Graduate student, Senior or Junior College student or an unclassified student may have

his work counted toward the M.D. degree he must be matriculated as a student of Rush Medical College and *he must each Quarter secure from the Dean of Medical Students a card of advice as to registration and must present this card to his own Dean on registering with him.*

- d) *Pay the University fees* for the ensuing Quarter. In order to do this, the student will present the *Matriculation card* and the proper *Registration card* at the office of the Registrar, Cobb Hall, Room A 1. On payment of fees the Registrar will stamp the Matriculation card and return it to the student, together with a receipt for tuition fees and for laboratory fees (if any).

Details as to fees will be found below.

The names of the students will be sent to instructors as entitled to attend classes *only, after the fees have been paid*, as above specified.

FEES FOR MATRICULATION, TUITION; DEPOSITS AND APPARATUS.

1. *Matriculation Fee.*

- a) The Matriculation Fee is \$5.00 and is required of every student on entrance to the University. It is payable but once.
- b) A Medical student will also matriculate as a student of Rush Medical College. No extra fee charged and the matriculation is good for the complete medical course including the clinical years.
- c) An undergraduate student, candidate for a bachelor's degree, who wishes to take the Medical Course as a part of the work for the Bachelor's degree will matriculate also as a student of Rush Medical College at the beginning of the first year of his work in the Medical course (see above 2, c). No extra fee is charged and the matriculation is good for the complete medical course including the clinical years.

NOTE.—Matriculation for Rush Medical College can be accomplished at the University through the Dean of Medical Students.

2. *Tuition Fee.*

- a) The tuition fee for the medical courses (3 to 3½ Majors each Quarter) is \$60.00 per Quarter including all laboratory fees.*

Under the medical practice acts and the rules of the medical examining boards of most of the states of this country, an applicant for a license to practice must have attended at least four annual sessions in a recognized medical school. Therefore, a student taking the medical courses with a view of procuring the degree of M.D., must matriculate as a medical

student, at least forty-five months before the date of his expected graduation in medicine. From the date of such matriculation he is required to pay the tuition fee for the medical courses, whether he is registered as a Senior-College student, a graduate student or as a medical-course student.

In order that a Graduate student, Senior or Junior College student or an Unclassified student may have his work counted toward the M.D. degree he must be matriculated as a student of Rush Medical College and *he must each Quarter secure from the Dean of Medical Students a card of advice as to registration and must present this card to his own Dean on registering with him.*

NOTE.—A student who is taking the medical courses with no intention of securing the medical degree, may, if he prefers, pay the usual University fee of \$40.00 per Quarter with additional laboratory fees as follows:

In Chemistry and Practical Gross Anatomy \$5.00 for a Major course and \$2.50 for a Minor course.

In all Biological Laboratory courses except Practical Gross Anatomy \$2.50 for a Major Course and \$1.25 for a Minor course.

- b) Students taking two Majors or less will pay \$20.00 per Major which sum includes laboratory fee.
- c) *All tuition and laboratory fees are due and payable on or before the FIRST day of EACH QUARTER. All fees are payable to the Registrar, Cobb Lecture Hall, Room A 1.*

Registration is not complete until all University bills are paid. Those who fail to meet this obligation within

* For students who were in actual attendance on the medical courses during the Spring Quarter, 1904 or previous thereto this fee is \$57.50 per Quarter.

the first five days of the Quarter are not regarded as members of the University. After the fifth day, to secure membership in the University the consent of the Dean and the payment of a fee of \$5.00 for late registration will be required.

There has been a gradual increase in the Medical tuition fee during the last few years, but a student in continuous attendance (at least two Quarters each year), may complete the medical curriculum by paying the fees in vogue at the time of his matriculation.

3. *Deposits.*

- a) A deposit of five dollars is required from each student taking the medical courses to cover the cost of unnecessary damage in the University buildings, and of avoidable loss and breakage in the laboratories. The deposit must be made on entering the University. Deductions will be made from this deposit to cover the cost of articles not returned, or of damage to University property. Each student will be charged for damage or loss for which he is individually responsible, and for his *pro rata* share of damage or loss, the responsibility for which cannot be individually located. The balance will be refunded.*
- b) Each student who procures a skeleton from the Osteological Laboratory will deposit twelve dollars for the same, which sum will be refunded when the skeleton is returned uninjured, he may, however, retain

the skeleton if he so desires, in exchange for the amount deposited.

4. *Microscopic and Other Laboratory Apparatus and Supplies.*

- a) A compound microscope is required for most of the medical courses. Every student is strongly advised to purchase a good microscope, with an immersion lens, in order that he may become familiar with the same instrument which he will use after his graduation. Students not possessing a microscope may rent one from the University Supply Department, at a cost of \$1.50 per Quarter for a compound microscope, and \$1.00 additional for an immersion lens.
- b) Biological Coupon tickets (\$2.50 or \$5.00) may be procured from the registrar for the purchase, at the supply department, of dissecting instruments, microscope slides, covers, and slide boxes, chemical apparatus (breakage), and such other appliances as may be required in the laboratory courses.
- c) Students taking courses in Chemistry are required to purchase Chemistry coupon tickets. Unused portions of coupon tickets are refunded.
- d) The necessary text-books may be purchased at the University Press.
- e) All students taking courses in the Department of Physical Culture are required to provide themselves with a gymnasium suit for use in the gymnasium. The cost of such a suit is about \$4.00.

ROOMS, BOARD, AND GENERAL EXPENSES.

Nine dormitories have thus far been erected in the Quadrangles. Two of these are reserved for the students of the Divinity School, and four are for women. A University House is organized in each dormitory; each House has a Head, appointed by the President of the University, and a House Committee, elected by the members; also a House Counselor, selected from the Faculties of the University by the members of the House. The membership of the House is determined by election, and each House is self-governing under the general control of the University Council.

The cost of rooms in the dormitories is from \$14.00 to \$75.00 per Quarter of twelve weeks. This includes heat, light, and care. The rooms in Snell Hall, and all but one on each floor of Foster, Kelly, Green, and Beecher Halls, are single, and intended for occupancy by one student each, unless special arrangement otherwise is made with the Head of the House. In North

and Hitchcock Halls the rooms are single and in suites of a study and two sleeping rooms. Diagrams of the halls, showing prices of the rooms, with full particulars, will be sent by the Registrar on application. Rooms will not be rented for a shorter period than a Quarter, except in the Summer Quarter. If a student desires to surrender a room at the end of the Quarter, notice to that effect must be given the Registrar three weeks prior to that date. The rooms are furnished with study table, chairs, bookcase, bedstead and mattress, bureau-com-mode, mirror, chamberware, and carpet rug. Rooms cannot be subrented, nor can exchange or transfer of rooms be made except by permission of the Registrar. In case of vacancies, applicants will be assigned rooms in the order of application. Each Hall for women has separate dining hall and parlors. The cost of table board in these halls is \$42.00 a Quarter.

All applications for rooms, or for information concern-

* The balance due on this deposit may be reclaimed at the end of any Quarter, and must be so reclaimed not later than the end of the third Quarter from the time the deposit was made.

ing rooms and board within or without the Quadrangles, should be made to the Registrar.

Undergraduate students not living in University Houses are not permitted to room in any building in which a family does not reside.

The following table will furnish an estimate of the annual expenses for thirty-six weeks of a student in the University, residing within the Quadrangles:

	LOWEST	AVERAGE	LIBERAL
University bill, tuition †‡.....	\$180 00	\$180 00	\$180 00
Rent and care of room.....	42 00	105 00	225 00
Board.....	100 00	126 00	225 00
Laundry.....	15 00	25 00	35 00
Text-books and Stationery.....	10 00	20 00	50 00
	\$347 00	\$456 00	\$715 00

It is believed that students who find it necessary to reduce expenses below the lowest of these estimates can

do so. Rooms outside the Quadrangles, furnished, with heat, light, and care, may be obtained at from \$1.00 a week upwards, the \$1.00 rate being easily secured where two students room together. Many places offer room and board from \$4.50 upwards. The University Commons, Hutchinson Hall, one of the Tower group of buildings recently completed, offers to students a boarding table at \$3.50 a week, and café service *à la carte*. There are student clubs which secure board at cost, the rate during the past year ranging from \$2.75 to \$3.50 a week. A list of approved boarding places outside the Quadrangles is kept on file at the Information Office, Cobb Lecture Hall, and information regarding them may there be obtained.

GENERAL INFORMATION FOR STUDENTS ENTERING THE JUNIOR AND SENIOR CLASSES AT RUSH MEDICAL COLLEGE.

Attendance.—In order to be properly credited with attendance on any given term or course, it is imperative that students be present at the opening of each Quarter. *After the second day of any Quarter no student can register except by special consent of the Dean, and the payment of five dollars late registration fee.*

Matriculation.—Each student matriculates on entering the College for the first time, but not for subsequent Quarters. *Matriculation may be accomplished by mail.*

Registration.—Each student registers at the beginning of each Quarter, or earlier if desired, by the payment of the tuition fee for the Quarter, and filing a registration card.

In case of early registration this card is retained at the Registrar's office and *must be reclaimed by the student in person, on the first or second day of the Quarter. If not reclaimed at that time, the student's registration for the Quarter will be canceled, and can only be restored by the Dean and the payment of five dollars late registration fee.*

Division of Classes into Groups.—In order to facilitate the arrangement of the classes for work in small groups, each class will be subdivided into groups of twelve students each, each group being designated by a letter. Students may be assigned to groups in the order of registration.

A student, upon entering the college at the beginning

of his first Quarter, will procure from the Registrar a blank application for admission, fill out the same carefully and return it to the Registrar, with the matriculation fee, for which he will receive a receipt.

The student will then present himself to the Dean of Students and exhibit to him the credentials for admission and for admission to advanced standing. (See Requirements for Admission to Advanced Standing, p. 18.)

The Dean will issue a card certifying admission to the proper class, and will advise respecting the courses of study to be taken.

COLLEGE FEES.

Matriculation fee, five dollars, payable but once.

Tuition for each Quarter, sixty dollars.

A discount of five dollars is made when the fee for three successive Quarters is paid in advance.

No student can be assigned to any College work until his fees are paid.

There has been a gradual increase in the tuition fee during the last few years, *but a student in continuous attendance (at least two Quarters each year) may complete the medical curriculum by paying the fees in vogue at the time of his matriculation.*

The semi-annual ticket for the county hospital is five dollars.

† Students attending the first Quarter must pay the matriculation fee of \$5.00 to the University.

‡ This item is reduced to \$165.00 for Medical students, who matriculated on or before April 1, 1903, or to \$172.50 for students who matriculated between April 1, 1903 and April 1, 1904.

DEPOSITS

A deposit of five dollars is required from each student to cover the cost of unnecessary damage in the College buildings, and of avoidable loss and breakage in the laboratories. Deductions will be made from this deposit to cover the cost of articles not returned, or of damage to College property. Each student will be charged for damage or loss for which he is individually responsible, and for his *pro rata* share of damage or loss, the responsibility for which cannot be individually located. The deposit must be made on entering the College.

Members of the graduating class may rent from the College the cap and gown worn at the commencement exercises. These articles are to be returned in good order.

PHYSICIAN'S FEE.

Graduates of this College are admitted to all lectures upon the payment of annual fee of five dollars. Graduates of other colleges, attending the full course, will pay the fees of undergraduate students.

Special laboratory courses may be taken on the payment of a fee of twenty dollars for each Major course.

Graduates of this or other colleges who are visiting the city for a brief time are cordially welcomed, but are requested to procure complimentary tickets at the office.

No one is authorized to make any modification of the terms regarding fees. On financial matters the Registrar, who represents the Comptroller at the College office, should be consulted.

The right is reserved to make changes in the fees, curriculum, or in any other matter at any time.

SCHEDULE OF LECTURE HOURS.

Schedules are issued from the College office giving the time and place of each exercise.

BOARD AND LODGING.

Rooms may be obtained in the vicinity of the College at from \$1.00 to \$3.00 per week. Day board may be had

at from \$2.00 to \$5.00 per week. Board and room together may be obtained at from \$3.50 to \$7.00 per week. A Bureau of Information is maintained at the College to which students may apply for directions as to desirable board and lodging.

Books and Instruments.—The average annual cost of the required books and instruments varies from \$15.00 to \$20.00.

The following table will furnish an estimate of the expenses of a student for each year:

	LOWEST	AVERAGE	LIBERAL
Tuition for each year.....	\$180 00	\$180 00	\$180 00
Board and room.....	126 00	180 00	252 00
Laundry	15 00	21 00	36 00
Books and instruments.....	15 00	21 00	36 00
Incidental expenses.....	45 00	75 00	105 00
	<u>\$384 00</u>	<u>\$477 00</u>	<u>\$609 00</u>

CREDENTIALS FOR WORK.

In order to obtain a credit slip for work of any year, each student should leave his correct home address at the College office before June 1. His credit slip will be sent to him by mail, and will show the amount of work done during the preceding year, together with any and all conditions registered against the student.

THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

A branch of the Young Men's Christian Association is in active operation at Rush Medical College, and the headquarters of the West Side Association are situated within a short distance of the College buildings. Membership in this Association, with the privilege of gymnasium, bath-rooms, lecture-courses, etc., may be obtained through the Rush Medical branch at reduced prices.

Further information in regard to the Association may be obtained by application to the Rush Medical College branch of the Association.

THE QUARTER SYSTEM.

The Academic year of Rush Medical College and of the University of Chicago is divided into four Quarters. These are designated as the Summer, Autumn, Winter, and Spring Quarters, beginning, respectively, on June 16, 1904, and on the first of October, the first of January, and on the first of April, each continuing for twelve

weeks. A recess of one week occurs between the end of each Quarter and the beginning of the next following, excepting that there is no recess between the end of the Spring and the beginning of the Summer Quarter, and that there is a recess of about one month at the close of the Summer Quarter.

THE MEDICAL CURRICULUM AS RELATED TO THE QUARTER SYSTEM.

The general course of instruction in Rush Medical College requires four years of study in residence, with a minimum of attendance upon three Quarters of each year. These years are designated as the Freshman, Sophomore, Junior, and Senior years, respectively.

A student may begin his college work on the first day of any Quarter [see, however, p. 27, § 5], and may continue in residence for as many successive Quarters as he desires, and will receive credit for work accom-

plished. Attendance during all the four Quarters of the year is optional, but will not secure a time-credit of more than one year in a medical school. At least forty-five months must elapse between the date of a first matriculation and the date of graduation. Under the restrictions imposed, this system does not conflict with the existing medical practice acts, nor with the rulings of the various State Boards of Medical Examiners.

THE SUMMER QUARTER.

Attention is directed to the special opportunities afforded for medical study in the Summer Quarter. The climate of Chicago is particularly well adapted to mid-summer work, the clinical resources of the College and of the dispensary being then actually increased in extent

and value. At this season, further, diseases may be studied which are rarely encountered during the other months of the year. Instruction in all departments is given in the Summer Quarter.

REQUIRED, ELECTIVE, AND OPTIONAL COURSES.

A certain number of courses, especially in the Freshman and Sophomore years of study, are required as essential to securing credit in making up the four years' curriculum which must precede graduation. All of the courses offered in the Junior and Senior years are elective that is, the student will be required to select from the list of elective courses a number sufficient to insure him credit for about 11 Majors each year. The term Major is fully explained in another paragraph. By this system the student can select not only his line of study, but also his teachers in such special lines; and can, further, so arrange his work that in successive years he can practically include all branches taught in the College. He will be required to present, however, a minimum amount

of credit in each department. See Requirements for Graduation.

The Quarter system with Elective Courses is especially well adapted to the medical curriculum, and possesses the advantage of allowing each student to select a portion of his studies, and so to adopt his course to his tastes, his abilities, and his needs.

Optional courses, in addition to those described above, are offered to students who desire to add to the regular work as outlined in the requirements for graduation. These optional courses are designed to promote a higher scholarship, and to increase facilities for work in special departments.

DEFINITION OF MAJOR AND MINOR.

A Major course is defined as a didactic or recitation course, occupying five hours a week for one Quarter (a total of 60 hours), or a laboratory, practical, or clinical course, occupying ten hours a week for one Quarter (a total of 120 hours). A double Major occupies twice the number of hours per week for the Quarter.

A Minor course is a didactic or recitation course,

occupying five hours a week for one half a Quarter, of six weeks; or a laboratory course, occupying ten hours per week for a similar period. The value of each course in the following departmental statements is stated as a *major* (Mj), a *double major* (DMj), a *minor* (M), a *double minor* (DM), or the decimal fraction of a *major* or *minor*.

GRADUATE COURSES IN MEDICINE FOR PHYSICIANS AND ADVANCED STUDENTS.

Special opportunities are afforded to physicians and graduate students at Rush Medical College and at the University for advanced and research work in Physics, Chemistry, Zoölogy, and Embryology, Anatomy, Neurology, Physiology, Physiological Chemistry, and Pharmacology, and in Pathology and Bacteriology in Medicine, Surgery, Obstetrics, Gynecology, and in the other clinical departments. Research work may be conducted independently, or under the direction of an instructor in the department to which it belongs.

Physicians are admitted on payment of the matriculation fee, and payment of fees in proportion to the amount of work taken (see p. 23). The applicant's fitness for any course which he desires to take should

be ascertained by consultation with the head of the respective department.

Courses especially adapted to students of this class are outlined in pages 28 to 59 of this ANNOUNCEMENT. Correspondence is invited in reference to special work other than the courses offered. It will be sufficient to address letters in reference to such courses to Rush Medical College.

Students desiring to engage in work leading to the degrees of Master of Science, Master of Arts, Master of Philosophy, or to the degree of Doctor of Philosophy, are requested to write for the *Circular of Information* of the Graduate Schools, the University of Chicago.

THE DEGREES OF S.B., A.B., AND PH.B.*

I. MEDICAL WORK IN THE COURSES FOR THE BACHELOR'S DEGREE.

The first two years' work in medicine consists almost entirely of courses in pure science, which are open as electives to all candidates for a Bachelor's degree at the University, who have had the necessary preliminary work in science.

Medical Work in the Course for the Degree of the Bachelor of Science.—A student who has completed the work of the Junior College of Science (two years) at the University or the second year at a college of good standing, and whose credits are accepted as a full equivalent of the corresponding courses at the University, may enter the Senior College (Junior year) at the University and take the first two years' work in medicine as the third and fourth years of his Bachelor's course; and provided he also takes either in an extra Quarter or as extra work during three Quarters, the specified required courses (three courses in History and Philosophy) of the Senior College of Science or has already taken these courses as electives in the Junior College, he may receive the degree of S.B. on the completion of the second year's work in medicine.

For the completion of the required work for the degree of S.B. and of the first two years in medicine, a student

will need, altogether, four years or four years and a quarter after entering the Junior College (Freshman year), or two years or two years and a quarter after entering the Senior College (Junior year), depending on the amount of work he carries per Quarter and the nature of the work he presented for entrance.

Candidates for the S.B. degree who intend to study medicine are strongly advised to take in their first two years at college (Freshman and Sophomore years) a large amount of work in Physics, Chemistry, and Biology, as giving the best foundation for the study of medicine (see below recommended course of study for students preparing to study medicine).*

Medical Work in the Course for the Bachelor of Arts or Philosophy.—A student who has completed the work of the Junior College of Arts or Literature (two years) at the University of Chicago or the Sophomore year at a college of good standing, whose credits are accepted by the University as a full equivalent of the corresponding courses, may enter the Senior College (Junior year) at the University and take from one to one and a half years' work in medicine as part of his bachelor's course and, provided he also takes the required work of the Senior College of Arts or Literature (four courses), receive the

*The required courses for the S.B. degree are given in bold-faced type; the courses recommended to be chosen as electives are given in common type. See also the article in the Medical Number of the *University Record*, May, 1903, which may be had on application.

degree of A.B. or P.H.B. on the completion of two years' work in college. The remainder of the medical work of the first two years may be taken after graduation and with all the privileges of graduate students.

For the completion of the required work for the degree of A.B. or P.H.B. and of the first two years' work in medicine a student will need from four and a quarter to five years after entering the first year of the Junior College, or two and a quarter to three years after entering the Senior College (Junior year) of the University of Chicago.

Candidates for the A.B. or P.H.B. degree who intend to study medicine are strongly advised to take in their first three years at college a large amount of work in Physics, Chemistry, and Biology as giving the best foundation for the study of medicine (see below recommended course of study for students preparing to study medicine).

For information in detail regarding the requirements for the Bachelor's degree at the University of Chicago see the Annual Register (1903-04).

II. COURSE OF COLLEGE STUDIES RECOMMENDED FOR STUDENTS PREPARING TO STUDY MEDICINE

- 1) The College studies which are recommended for students preparing to study medicine are as follows:

English, 3 Majors; French or German, 3 Majors (a reading knowledge in each language must be obtained from these courses and those offered for admission to College); Mathematics, 2 Majors; History, 2 Majors; Philosophy, 1 Major; General Biology, 1 Major; Physics, 2 or 3 Majors; Chemistry, 3 to 6 Majors; General Chemistry, Qualitative Analysis, Organic Chemistry, Comparative Anatomy, 1 or 2 Majors.

These eighteen (18) to twenty-four (24) Majors will require six (6) to eight (8) Quarters for completion. The History and Philosophy, or part of the Chemistry, may be taken during the time that the student is doing his first two years' work in medicine.

- 2) For students who wish to devote three years in college in preparing for medicine before entering on medical work proper, the following courses are recommended for the choice of additional electives: * Greek, 3 Majors; Calculus, 1 Major; Elementary Botany, 1 Major, Course 1; General Morphology of Thallophytes, 1 Major, Course 7; Introductory Physiology, 1 Major, Course 1; Physical Chemistry, 1 Major, half-Major Courses 31 and 32 or Course 23; Quantitative Chemical Analysis, 1 Major, Course 9; Physiography, 1 Major.

THE WORK OF THE MEDICAL COURSE FOR THE FRESHMAN AND SOPHOMORE YEARS.

1. *Outline of the Course.*

The course for the first two years' work in Medicine consists mainly of instruction in the fundamental medical sciences: Human Anatomy, Microscopic Anatomy, Histology, Neurology, and Embryology, Physiology, Physiological Chemistry, The Chemistry of Medicinal Drugs, Pharmacology, Pathology, and Bacteriology. All of this work is given at the University of Chicago.

2. *Amount of Work.*

The amount of work required is eighteen Majors. A Major (Mj.) is the unit of work and consists of five hours per week in class-room throughout one Quarter (12 weeks) or the equivalent amount of laboratory work a week (a total of 60 hours class-room work or the equivalent amount of laboratory work).

Two hours of laboratory work are ordinarily regarded as the equivalent of one hour of class-room work.

A *Minor* (M.) consists of five hours a week in class-room, throughout one term (six weeks) or the equivalent amount of laboratory (a total of 30 hours of class-room work, or an equivalent amount of laboratory work).

A *Double Major* (DMj.) course occupies twice as many hours per week as does a Major, a *half Major* course ($\frac{1}{2}$ Mj.) one-half the time per week.

3. *The Curriculum.*

- 1) Except in the case of certain students with special preparation (see below, 4) all the work of the Medical Course is prescribed for those who wish to receive

* Detailed statements concerning the courses are given below under the various departments of instruction. They should be consulted in every case in regard to equivalent courses which may be submitted for those whose numbers are given in the above table.

credit for the first two years' work in Medicine. For students entering after June 18, 1904, it consists of the following courses:*

- a) CHEMISTRY: The Chemistry of Medicinal Drugs, $\frac{1}{2}$ Major (19).†
 - b) ANATOMY: $7\frac{1}{2}$ Majors as follows:
 - Osteology, $\frac{1}{2}$ Major (6).
 - Human Anatomy (Dissecting), $3\frac{1}{2}$ Majors (1, 2, 3, and 4 or 5).
 - Splanchnology, Histology, and Cytology, $1\frac{1}{2}$ Majors (10, 11 and 12).
 - Embryology, 1 Major (Zoölogy 20 or 21).
 - Neurology, 1 Major (Neurology 3).
 - c) PHYSIOLOGY: $6\frac{1}{2}$ Majors, as follows:
 - Physiology, $3\frac{1}{2}$ Majors (12, 13, 14).
 - Physiological Chemistry, $1\frac{1}{2}$ Majors (20).
 - Pharmacology, $1\frac{1}{2}$ Majors (21).
 - d) PATHOLOGY: $3\frac{1}{2}$ Majors, as follows:
 - Bacteriology, $1\frac{1}{2}$ Majors (1).
 - Pathology, 2 Majors (2A and 2B).
- 2) For students who entered before June 17, 1904, the curriculum will be as published in last year's ANNOUNCEMENT.

4. Election of Medical Courses.

Students are permitted to elect the work of the first two years of medicine provided they have had the following preparation: Eighteen Majors (approximately two years) of college work in the University of Chicago or an equivalent amount done in some other university or college of good standing. This work must have included one Major of Physics, three Majors of Inorganic Chemistry (or two Majors of Inorganic Chemistry in addition to one year of high-school Chemistry), one Major of Organic Chemistry, one Major of General Biology with laboratory work, and a reading knowledge of German and French.

In electing his work the student should bear in mind:

- a) The right of election must be confirmed in writing in advance by the Dean.
- b) His registration for each Quarter must receive the approval of the Dean.
- c) That the prerequisites for any course must have been satisfied before the course can be elected.
- d) That a minimum amount of work in the several branches is required for graduation in Medicine.

- 5) The curriculum of instruction has been arranged in such a way as to insure for the student beginning his medical studies with any single Quarter of the year, a complete annual course during any three consecutive Quarters; but students are advised to begin their medical work proper with the Autumn Quarter, if possible.

The following table shows the arrangement of the courses for the six Quarters of work comprised in the first two years of Medicine and the recommended sequence of studies. No student, however, is obliged to follow the order given, or to take full work in any Quarter. Credit will be given for every course satisfactorily completed.

FIRST NINE MAJORS OF WORK.

AUTUMN, 1904.

Splanchnology, Histology, and Cytology (Anat. 10 and 11), 1 Major; *Osteology* (Anat. 6), $\frac{1}{2}$ Major; *Human Anatomy* (1 or 2 and 4 or 5), $1\frac{1}{2}$ Major. The following other courses are given in this Quarter, and are open to students with advanced standing and the necessary prerequisites: Bacteriology, Physiology, Analytical Chemistry, laboratory work in Organic Chemistry, and advanced work in all the departments.

WINTER, 1905.

Splanchnology, Histology, and Cytology (Anat. 12), $\frac{1}{2}$ Major; *Human Anatomy* (1, 2, or 3), 1 Major; *Physiology* (20), $1\frac{1}{2}$ Majors. Other courses given are: Analytical and Organic Chemistry, Physiology, Physiological Chemistry, Pathology, and advanced work in all the departments.

SPRING, 1905.

Embryology (Zoölogy 20), 1 Major; *Physiology* (12), 1 Major; *Neurology* (3), 1 Major. Other courses given are: Analytical and Organic Chemistry, Pathology, and advanced work in all the departments.

SECOND NINE MAJORS OF WORK.

AUTUMN, 1904.

Bacteriology (Pathol. 1), $1\frac{1}{2}$ Majors, *Physiology* (13), $1\frac{1}{2}$ Majors. Other courses given are: Human Anatomy, Chemistry, and advanced work in all the departments.

WINTER, 1905.

Pathology (Pathol. 2A.), 1 Major; *Physiology* (14), 1 Major; *Anatomy* (Anat. 1, 2 or 3), 1 Major. Other

* A good college course in Chemistry, both inorganic and organic, is required for entrance to the Medical courses. Students otherwise prepared may be admitted conditioned in Chemistry.

† The numbers in parenthesis refer to the course numbers in the corresponding department.

‡ The numbers refer to the course numbers in the departments named. The departmental announcements below should be consulted in regard to equivalent courses which may be substituted for those whose numbers are given in the above table.

courses given are: Splanchnology, Chemistry, and advanced work in all the departments.

SPRING, 1905.

Pathology (2B.), 1 Major; *Pharmacology* (Physiol. 21), 1½ Majors; *Chemistry of Medicinal Drugs* (Chem. 19), ½ Major. Other courses given are: Embryology, Physiology, Human Anatomy, Chemistry, Neurology, and advanced work in all the departments.

6. *Supervision of Work.*

In addition to the regular supervision of the Dean the grades of Medical students are reviewed each Quarter by the Committee on Promotions, representing all the departments giving Medical instruction of the first two years. If a student's work is poor, the committee may revise or limit his registration, and, if deemed necessary, may request his withdrawal from the Medical Courses.

7. *Certificate of Completion of the First Eighteen Majors.*

On completion of his first two years in medicine, the work of each student is reviewed by the Committee on Promotions. If his work is considered satisfactory, a certificate of completion of the first eighteen majors of Medical studies is issued. If his work is considered unsatisfactory or doubtful, the committee may require further work in one or more departments or subject the student to such examination as may be deemed necessary. *No student is admitted to the Junior class in Rush Medical College without the above mentioned certificate.* Students with conditions in work of the first two years are sometimes permitted to proceed with their clinical studies, but such permission does not constitute admission to the Junior class.

I. DEPARTMENT OF ANATOMY.

INCLUDING COURSES IN DEPARTMENTS XXIII, ANATOMY, XXII, ZOOLOGY, AND XXV, NEUROLOGY, THE UNIVERSITY OF CHICAGO.

XXIII. THE DEPARTMENT OF ANATOMY.

OFFICERS OF INSTRUCTION.

LEWELLYS FRANKLIN BARKER, M.B., *Professor of Anatomy and Head of the Department of Anatomy.*

ROBERT RUSSELL BENSLEY, A.B., M.B., *Assistant Professor of Anatomy.*

PRESTON KYES, A.M., M.D., *Assistant Professor of Anatomy.*

JOHN GORDON WILSON, A.M., M.B., *Instructor in Anatomy.*

GEORGE ELMER SHAMBAUGH, M.D., *Instructor in Anatomy of the Ear, Nose, and Throat.*

BASIL COLEMAN HYATT HARVEY, A.B., M.B., *Instructor in Anatomy.*

DANIEL GRAISBERRY REVELL, A.B., M.B., *Instructor in Anatomy.*

DEAN DEWITT LEWIS, A.B., M.D., *Instructor in Anatomy.*

BURTON JESSE SIMPSON, S.B., M.D., *Associate in Anatomy.*

BENSON AMBROSE COHOE, A.B., M.B., *Associate in Anatomy.*

FELLOWS.

1904-1905.

EMIL GOETTSCH, S.B.

EDWIN GARVEY KIRK, S.B.

At Rush Medical College.

CHARLES A. PARKER, M.D., *Instructor in Anatomy.*

THOMAS A. OLNEY, M.D., *Instructor in Anatomy.*

INTRODUCTORY.

The general outline of the work provided for in courses is as follows: During the Autumn Quarter, Dissection, Osteology, Splanchnology, Histology, and Cytology are studied; in the Winter Quarter, Dissection is continued, as are also Splanchnology, Histology, and Cytology; in the Spring Quarter, Dissection, Neurology, and Embryology are offered, and optional courses in Advanced Microscopic Anatomy, Advanced Gross Anatomy, Structure of the Blood, etc., are available. The teaching is chiefly in the laboratory, under direction; but this may be supplemented by

demonstrations, lectures, and recitations. During the Summer Quarter courses are offered in Osteology, Splanchnology, Histology, and Cytology, Histological Technique, Introductory Human Anatomy, Histogenesis, and Organogenesis. Special courses for physicians and advanced students are also offered in the Summer Quarter. These include courses in the Anatomy of the Eye, Ear, Nose and Throat, and Pelvic Viscera. Opportunities for research are offered every Quarter.

COURSES OF INSTRUCTION.

Summer Quarter, 1904—Spring Quarter, 1905.

M=Minor course=a single course for six weeks. DM=Double Minor course=(two hours daily) for six weeks. Mj=Major course=a single course for twelve weeks. DMj=Double Major course=a double course for twelve weeks.

*1. Dissection of Arm (Human).

The student makes a complete dissection of all structures, using atlases and text-books as guides. The work is largely independent. The laboratories for dissecting are open every day from 8:30 A.M. to 5:00 P.M. (Saturdays until 1:00 P.M.), during the Autumn, Winter and Spring Quarters. A dissection must be completed in the Quarter in which it is undertaken.

Mj. Autumn Quarter.

Repeated in Winter and Spring Quarters.

PROFESSOR BARKER, DRs. LEWIS, WILSON,
HARVEY, SIMPSON, AND OTHERS.

(Laboratory fee, \$5.00.)

2. Dissection of Leg (Human).

The arrangements for this course are similar to those for Course 1.

Mj. Autumn Quarter.

Repeated in Winter and Spring Quarters.

PROFESSOR BARKER, DRs. LEWIS, WILSON,
HARVEY, SIMPSON, AND OTHERS.

(Laboratory fee, \$5.00.)

3. Dissection of Head, Neck, and Spinal Column (Human).

The arrangements for this course are similar to those for Course 1.

Mj. Autumn Quarter.

Repeated in Winter and Spring Quarters.

PROFESSOR BARKER, DRs. LEWIS, WILSON,
HARVEY, SIMPSON, AND OTHERS.

(Laboratory fee, \$5.00.)

4. Dissection of Wall of Thorax and Thoracic Viscera (Human).

The arrangements for this course are similar to those for Course 1.

$\frac{1}{2}$ Mj. Autumn Quarter.

Repeated in Winter and Spring Quarters.

PROFESSOR BARKER, DRs. LEWIS, WILSON,
HARVEY, SIMPSON, AND OTHERS.

Prerequisite: *Course 1.*

(Laboratory fee, \$2.50.)

5. Dissection of Wall of Abdomen and Pelvis, and of Abdominal and Pelvic Viscera (Human).

The arrangements for this course are similar to those for Course 1.

$\frac{1}{2}$ Mj. Autumn Quarter.

Repeated in Winter and Spring Quarters.

PROFESSOR BARKER, DRs. LEWIS, WILSON,
HARVEY, SIMPSON, AND OTHERS.

Prerequisite: *Course 1 or 2.*

(Laboratory fee, \$2.50.)

6. Human Osteology.

A systematic study of the human skeleton will be undertaken. The bones of the human body will be drawn, or modeled in clay, in the laboratory. The structure of the composite bones will be considered from the comparative and embryological standpoints.

$\frac{1}{2}$ Mj. Autumn Quarter.

Lecture: Tues., 8:30.

Laboratory: Tues., 9:30-1:00.

DR. HARVEY.

(Laboratory fee, \$1.25.)

6A. Human Osteology.

Equivalent to Course 6.

M. First Term, Summer Quarter.

Lecture: Tues. and Thurs., 8:00.

Laboratory: Tues. and Thurs., 9:00-12:30.

DR. REVELL.

(Laboratory fee, \$1.25.)

10. Splanchnology, Histology, and Cytology.

A brief course on the structure of the cell and elementary tissues will be followed by a study of the structure of the various viscera.

M. First Term, Autumn Quarter.

Lectures: Mon., Fri., 9:30.

Laboratory: Mon., Fri., 10:30-1:00; Thurs.,
11:00-1:00. ASSISTANT PROFESSOR BENSLEY,

DRs. REVELL, COHOE, AND OTHERS.

(Laboratory fee, \$1.25.)

* Courses 1, 2, 3, 4, and 5 will also be given at Rush Medical College during the Winter Quarter, 1904, by Dr. Chas. A. Parker. Hours: daily 1:00-4:00 P.M.

10A. Equivalent to Course 10.

M. First Term, Summer Quarter.

Lectures: Mon., Fri., 8:00.

Laboratory: Mon., Wed., Fri., 9:00-12:30.

DR. HARVEY AND ASSISTANT.

(Laboratory fee, \$1.25.)

11. Course 10 (continued).

M. Second Term, Autumn Quarter.

Lectures: Mon. and Tues., 9:30.

Laboratory: Mon. and Fri., 10:30-1:00; Tues.,

11:00-1:00.

ASSISTANT PROFESSOR BENSLEY,

DRS. REVELL, COHOE, AND OTHERS.

Prerequisite: *Course 10 or its equivalent.*

(Laboratory fee, \$1.25.)

11A. Course 10A (continued).

DM. Second Term, Summer Quarter.

Lectures: Mon., Tues., Wed., Thurs., 8:00.

Laboratory: Mon., Tues., Wed., Thurs., 9:00-

12:30.

DR. HARVEY AND ASSISTANT.

(Laboratory fee, \$2.50.)

12. Course 11 (continued).

M. First Term, Winter Quarter.

Lectures: Wed., Fri., 9:30.

Laboratory: Wed., Fri., 10:30-1:00; Thurs.,

11:00-1:00.

ASSISTANT PROFESSOR BENSLEY,

DRS. REVELL, COHOE, AND OTHERS.

(Laboratory fee, \$1.25.)

13. Splanchnology, Histology, and Cytology.—(Advanced.)

In this course the student will undertake a thorough study of the structure of the important organs. A knowledge of the normal appearance and texture of the organs will be gained by the dissection of fresh specimens, the dissecting microscope being used to supplement the information gained by ordinary methods of dissection. Finally the compound microscope will be employed in the study of prepared sections.

1Mj. Winter Quarter.

Lectures: Wed. and Fri., 9:30.

Laboratory: Wed. and Fri., 10:30-1:00.

Thurs., 9:30-12:00.

ASSISTANT PROFESSOR BENSLEY,

DRS. REVELL, AND OTHERS.

(Laboratory fee, \$2.50.)

14. Histological Technique.

The main methods of histological preparation. In the laboratory work students will prepare specimens by the various methods of fixing, hardening, staining, and sectioning, now in general use.

DM. First Term, Summer Quarter.

Lectures and Laboratory: Mon., Wed., Fri., 2:00-5:00.

DR. REVELL.

(Laboratory fee, \$2.50.)

15. Splanchnology.

The topographical relations of the thoracic and abdominal viscera will be studied in transverse sections of the human subject. The knowledge thus gained will be supplemented by a study of the entire organs preserved in their natural shapes by formalin injections. The vessels, ducts and natural cavities of organs will be studied by the various methods of injection, maceration and corrosion. Finally the development of the form and relations of the organs will be studied by dissection of the foetus.

½Mj. Autumn Quarter.

DR. COHOE.

(Laboratory fee, \$1.25.)

16. Splanchnology.

(Course 15 continued).

½Mj. Winter Quarter.

DR. COHOE.

(Laboratory fee, \$1.25.)

17. Neurology.

Elementary histology and microscopic anatomy of the nervous system and sense organs. See Department XXV, Courses 3 and 3A, etc.

18. Vertebrate Embryology.

Lectures, demonstrations and laboratory work. See Department XXII, Courses 20 and 21.

PRIMARYLY FOR THE GRADUATE SCHOOL.

20. Anatomy of the Ear, Nose and Throat.

Special anatomy for practicing physicians and advanced students. This course will consist of laboratory work, lectures, and demonstrations of anatomical preparations. DM First Term, Summer Quarter.

Lectures and Laboratory: Mon.-Thurs., 2:00-5:00.

DR. SHAMBAUGH.

(Laboratory fee, \$2.50.)

21. Anatomy of the Eye.

Special anatomy for practicing physicians and advanced students.

DM. First Term, Summer Quarter.

Mon.-Thurs., 8:30-12:00.

DR. LEWIS.

(Laboratory fee, \$2.50.)

22. Anatomy of the Abdominal and Pelvic Viscera and Pelvic Floor.

Special anatomy for practicing physicians and advanced students. Suited to those purposing to pay especial attention to gynecology.

DM. First Term, Summer Quarter.

DR. LEWIS.

(Laboratory fee, \$5.00.)

23. Anatomy of the Pharynx and Larynx.

Special course for practicing physicians and advanced students, to consist of lectures and laboratory work on the development, gross and microscopic anatomy of these organs. Special attention will be given to the nervous mechanism and its influence on the function.

DM. First Term, Summer Quarter.

Lectures and Laboratory work: Mon., Tues., Wed., Thurs., 2:00-5:00.

DR. WILSON.

(Laboratory fee, \$2.50.)

24. Anatomy of the Lymphatic System.

A special study will be made by dissection, injection, etc., of the distribution of the various systems of lymphatic vessels.

Mj. Spring Quarter.

DR. LEWIS.

(Laboratory fee, \$2.50.)

30. Physiological Histology.

The Organs of Respiration, Circulation, Absorption, Secretion, and Excretion will be studied from the standpoint of the relation of these structures to the functions they perform. The changes in the structure of the cells of the parenchyma of secretory and excretory organs as results of section and stimulation of their nerves of supply, of the action of drugs, and of normal physiological activity, will be studied. Especial attention will be paid to cellular micro-chemistry.

Mj. Spring Quarter.

Lectures: Mon. and Fri., 2:00-3:00.

Laboratory: Mon. and Fri., 3:00-5:00; Wed., 2:00-5:00.

ASSISTANT PROFESSOR BENSLEY

AND DR. REVELL.

Prerequisites: *Courses 12 and 13 or their equivalents and a reading knowledge of French and German.*

(Laboratory fee, \$2.50.)

31. Hæmology.

In this course instruction will be given in the various methods of examination of the blood, including the counting of the corpuscles, the estimation of hæmoglobin, the differential counting of white cells in dried and stained preparations, and studies in hæmolysis, cytolysis and anti-bodies.

Mj. Spring Quarter.

ASSISTANT PROFESSOR KYES.

[Not to be given in 1905.]

(Laboratory fee, \$2.50.)

32. Histogenesis.

The changes taking place in the elementary tissues will be followed from the blastogenic period to adult life. Certain tissues will be taken as types of the

general problems of development and will be studied and discussed from this point of view.

Mj or DMj. Summer Quarter.

Lectures and Laboratory.

DR. REVELL.

(Laboratory fee, \$2.50.)

33. Organogenesis.

Structural changes in certain organs will be followed in the development from the embryonic to the adult form.

M. Second Term, Summer Quarter.

Lectures and Laboratory: Mon., Wed., 8:30-12:00.

DR. WILSON.

Prerequisite for Courses 32 and 33: *A knowledge of the main facts of Embryology, Splanchnology, and Histology.*

(Laboratory fee, \$1.25.)

34. Advanced Histology and Cytology.

The solution of various problems in connection with tissues and cells will be undertaken. Especial attention will be paid to experimental methods.

Mj. Spring Quarter.

ASSISTANT PROFESSOR BENSLEY AND DR. COHOE.

Prerequisite: *Courses 10 and 11.*

(Laboratory fee, \$2.50.)

35. Mammalian Osteology.

The skeletal structures of a number of representative mammals will be studied.

Mj. Spring Quarter.

ASSISTANT PROFESSOR BENSLEY AND DR. HARVEY.

(Laboratory fee, \$2.50.)

40. Advanced Work.

Opportunities are offered for advanced work in all branches of anatomy.

1 to 3Mj.

PROFESSOR BARKER, ASSISTANT PROFESSORS

BENSLEY AND ———.

(Laboratory fee, \$2.50.)

41. Research Work.

The laboratory is equipped for the original investigation of anatomical problems. Suitably trained and endowed students, or physicians who have the time to do such work, will be encouraged to undertake it.

1 to 4Mj.

PROFESSOR BARKER, ASSISTANT PROFESSORS

BENSLEY AND ———.

42. Seminar.

A limited number of students can, by special arrangement, be admitted to a seminar, in which subjects of current interest in Gross or Microscopic Anatomy will be discussed.

1-2Mj. Autumn and Winter Quarters.

Fri., 4:00.

PROFESSOR BARKER.

XXII. THE DEPARTMENT OF ZOOLOGY.

OFFICERS OF INSTRUCTION.

CHARLES OTIS WHITMAN, PH.D., LL.D., *Professor and Head of the Department of Zoölogy; Curator of the Zoölogica Museum.*

FRANK RATTRAY LILLIE, PH.D., *Associate Professor of Embryology; Assistant Curator of the Zoölogical Museum.*

CHARLES MANNING CHILD, PH.D., *Instructor in Zoölogy.*

WILLIAM LAWRENCE TOWER, S.B., *Instructor in Embryology.*

HENRY HIGGINS LANE, S.B., *Laboratory Assistant in Zoölogy.*

VICTOR EARNEST SHELFORD, B.S., *Laboratory Assistant in Zoölogy.*

OSCAR RIDDLE, B.S., *Laboratory Assistant in Zoölogy.*

REUBEN MYRON STRONG, *Assistant in Zoölogy* (Summer Quarter, 1904).

JOHN WILLIAM SCOTT, A.M., *Laboratory Assistant in Zoölogy* (Summer Quarter, 1904).

WILLIAM JACOB BAUMGARTNER, A.M., *Laboratory Assistant in Zoölogy* (Summer Quarter, 1904).

JAMES FRANCIS ABBOTT, A.B., *Laboratory Assistant in Zoölogy* (Summer Quarter, 1904).

FELLOWS.

1904-1905.

WILLIAM JACOB BAUMGARTNER, A.B.,

LYNDS JONES, A.B., S.M.,

HORATIO HACKETT NEWMAN, A.B.

THOMAS CALDERWOOD STEPHENS, A.B.

INTRODUCTORY.

In the department are offered (1) courses in General Biology and Comparative Anatomy, which form the foundation for the study of Medicine, and which are strongly recommended to college students preparing to study Medicine (see p. 26, II, 1; (2) a course in Embryology, which is required of all medical students; and (3) advanced and research work in various branches of Zoölogy, as noted on p. 417 of the *Annual Register* (1903-4):

During the summer quarter general courses in Zoölogy will be given at the University, at the Marine Biological Laboratory, Woods Hole, Mass., and at the Biological Laboratory, Cold Spring Harbor, L. I. Provision will also be made for research students at these places.

COURSES OF INSTRUCTION.

Summer Quarter, 1904—Spring Quarter, 1905.

M=Minor course—a single course of six weeks. DM=Double Minor course—a double course (two hours daily) for six weeks. Mj=Major course—a single course for twelve weeks. DMj=Double Major course—a double course for twelve weeks.

JUNIOR COLLEGE COURSES.

2. General Biology.

Lectures, recitation and laboratory work dealing with topics of a general biological nature, such as: the classification of the biological sciences; protoplasm; the cell; structure and activities of unicellular animals; structure and activities of multicellular animals (frog as type, including its anatomy, histology, general physiology and development).

Mj. Autumn Quarter.

Lectures: Mon., Wed., Fri., 4:00.

Laboratory: 6 hours a week, afternoons.

ASSOCIATE PROFESSOR LILLIE AND MR. ———.

DM. First Term, Summer Quarter.

Lectures: Mon. to Fri., 11:30.

Laboratory: 12 hrs., mornings.

DR. STRONG.

SENIOR COLLEGE COURSES.

10. Vertebrate Anatomy.

Lectures, laboratory work and demonstrations upon the comparative anatomy of Vertebrates both living and fossil. The evolution of the Vertebrates is traced in detail. In the laboratory the following types of Vertebrates will be studied, Amphioxus, Pisces, Amphibia, Reptilia.

Mj or DMj. Autumn Quarter.

Lectures: Mon., Wed., Fri., 9:30.

Laboratory: Mon., Wed., Fri., 2:00-5:00.

16 hrs. in laboratory for DMj. MR. TOWER.

Prerequisite: Courses 2, 5, 6, and 9, or their equivalents.

11. Vertebrate Anatomy.

Course 10 (continued).

Reptilia, Aves, Mammalia

Mj or DMj. Winter Quarter.

Lectures: Mon., Wed., Fri., 9:30.

Laboratory: Mon., Wed., Fri., 2:00-5:00.

MR. TOWER.

Prerequisite: *Same as in Course 10.*

NOTE.—In Courses 10 and 11 special arrangements will be made for DMj students.

16. Cytology.

Morphology and physiology of the cell; cell-division; cytological theories; the cell and the organism; theory and practice of fixation and staining. The lectures will be supplemented by collateral reading and discussions. Mj or DMj. Spring Quarter.

Lectures: Three times a week; hours to be arranged with class.

Laboratory: Afternoons; 8 hrs. a week.

DR. CHILD.

[To be given in 1905.]

18. Physiology of Development.

The lectures will deal with general and experimental embryology, and with the mechanics of embryonic development, including: the history of the germ-cells; fertilization; the rôle of cell-division in development; intra-cellular differentiation; correlative differentiation of organs. The laboratory work will be on the early development of selected types of Vertebrates and Invertebrates. Mj or DMj. Winter Quarter.

Lectures: Mon., Wed., Fri., 8:30.

Laboratory: 6 or 16 hours a week.

By special permission the lectures alone may be taken as $\frac{1}{2}$ Mj. ASSOCIATE PROFESSOR LILLIE.

Prerequisite: *Courses 2 and 20; Course 16 is desirable.*

20. Vertebrate Embryology.

Birds and mammals.

Lectures, demonstrations and laboratory work.

Mj or DMj. Spring Quarter.

Lecture: Fri., 8:30.

Laboratory:

Sec. a: Mon. and Tues., 2:00-5:00, and Wed., 11:00-1:00.

Sec. b: Wed., 11:00-1:00, and Thurs. and Fri., 2:00-5:00. ASSOCIATE PROFESSOR LILLIE

AND MR. TOWER.

Prerequisite: *Course 2, and Anatomy 10, 11, and 12, or their equivalents.*

NOTE.—Course 20 and the two courses in Vertebrate Anatomy constitute a course in Vertebrate Morphology running through the year, and may well be taken together.

21. Embryology.

Lectures, demonstrations and laboratory work.

DM. First Term, Summer Quarter.

Lectures: Mon.-Fri., 8:00.

Laboratory: Twelve hours; mornings.

MR. TOWER.

For other courses in this Department see the Departmental Announcements, p. 417 of the *Annual Register* (1903-4).

XXV. THE DEPARTMENT OF NEUROLOGY.

OFFICERS OF INSTRUCTION.

HENRY HERBERT DONALDSON, PH.D., *Professor and Head of the Department of Neurology.*

SHINKISHI HATAI, PH.D., *Assistant in Neurology.*

ELIZABETH HOPKINS DUNN, M.D., *Research Assistant in Neurology.*

KATASHI TAKAHASHI, *Technical Assistant in Neurology.*

CHARLES E. INGBERT, PH.D., *Honorary Research Assistant in Neurology* (Autumn Quarter, 1903; Winter and Spring Quarters, 1904.)

FELLOW.

1904-1905

STEPHEN WALTER RANSON, S.B., M.S.

INTRODUCTORY.

The courses here offered are intended to furnish an account of the histology, microscopic anatomy, and architecture of the Nervous System such as will be required by Students of Anatomy and those preparing for Medicine or Psychology, and also to give the opportunity both for the investigation of new problems and for a critical discussion of current work in Neurology. Course 3 forms part of the required work in Histology and Microscopic Anatomy

for those taking the first two years' work in Medicine. The Neurological Journal Club—open to graduate students—meets every Monday afternoon.

For each Major course requiring laboratory work the laboratory fee is \$2.50. For medical students this fee is included in the quarterly tuition fees.

COURSES OF INSTRUCTION.

Summer Quarter, 1904 — Spring Quarter, 1905.

M=Minor course—a single course for six weeks. DM=Double Minor course—a double course (two hours daily) for six weeks. Mj=Major course—a single course for twelve weeks. DMj=Double Major course—a double course for twelve weeks.

1. The Architecture of the Central Nervous System.

Mj. Autumn Quarter.

Lectures: Mon., Tues., 9:30.

Laboratory: Thurs., Fri., 2:00-4:00.

PROFESSOR DONALDSON AND DR. HATAI.

Prerequisite: *Microscopic Anatomy*.

(Laboratory fee, \$2.50.)

2. The Growth of the Brain and its Physical Characters as related to Intelligence.

Mj. Winter Quarter.

Lectures: Mon., Tues., 9:30.

Laboratory: Thurs., Fri., 2:00-4:00.

PROFESSOR DONALDSON AND DR. HATAI.

Prerequisite: *Microscopic Anatomy*.

(Laboratory fee, \$2.50.)

3. Gross and Microscopic Anatomy of the Human Central Nervous System and Sense Organs.

This is a required course for medical students.

Mj. Spring Quarter.

Lectures: Mon., Tues., 8:30.

Recitation: Wed., 8:30.

Laboratory: Mon., 9:30-1:00; Tues., 11:00-1:00.

PROFESSOR DONALDSON,

DR. HATAI AND ASSISTANTS.

Prerequisite: *Microscopic Anatomy*.

(Laboratory fee, \$2.50.)

3A. Gross and Microscopic Anatomy of the Human Central Nervous System and Sense Organs.

(Repeated.) See Course 3.

DM. First Term, Summer Quarter.

Lectures: Mon.-Thurs., 8:30.

Laboratory: 10 hrs. a week. DR. HATAI.

Prerequisite: *Microscopic Anatomy*.

(Laboratory fee, \$2.50.)

11. Physical and Chemical Characters of the Nervous System in relation to Histological Technique.

DM. Second Term, Summer Quarter.

Lectures: Mon.-Thurs., 8:30.

Laboratory: 10 hrs. a week. DR. HATAI.

11A. Physical and Chemical Characters of the Nervous System in relation to Histological Technique.

$\frac{1}{2}$ Mj. Autumn Quarter.

Lectures and Laboratory work.

Hours to be arranged.

DR. HATAI.

12. Cytology of the Neurone.

$\frac{1}{2}$ Mj. Winter Quarter.

Lectures and Laboratory work.

Hours to be arranged.

DR. HATAI.

4, 5, 6. Seminar.

The purposes of the Seminar are threefold:

a) Initiation into the methods of research.

b) The history of the guiding conceptions in Neurology.

c) Discussion of such literature as is too technical for presentation at a general Journal Club.

3Mj. Autumn, Winter, and Spring Quarters.
2 hrs. a week.

Autumn, Winter, and Spring Quarters, 3:00-5:00.

PROFESSOR DONALDSON.

Admission to the Seminar is granted only after consultation with the head of the department.

7, 8, 9, 10. Research Courses: *The Study of Neurological Problems.*

4Mj. Summer Quarter.

DR. HATAI.

Autumn, Winter, and Spring Quarters.

Laboratory work. Throughout the year.

PROFESSOR DONALDSON AND DR. HATAI.

Prerequisite: *A knowledge of the main facts of Neurology.*

II. DEPARTMENT OF PHYSIOLOGY.

(AT THE UNIVERSITY DEPARTMENT XXIV, INCLUDING PHYSIOLOGICAL CHEMISTRY AND PHARMACOLOGY.)

OFFICERS OF INSTRUCTION.

GEORGE NEIL STEWART, D.Sc., M.D., *Professor and Head of the Department of Physiology.*ALBERT PRESCOTT MATHEWS, PH.D., *Assistant Professor of Physiological Chemistry.*DAVID JUDSON LINGLE, PH.D., *Assistant Professor of Physiology.*_____, *Associate in Physiology.*SAMUEL A. MATTHEWS, M.D., *Assistant in Pharmacology.*CHARLES CLAUDE GUTHRIE, M.D., *Assistant in Physiology.*HUGH MCGUIGAN, S.B., *Assistant in Physiological Chemistry.*FRED RIESKE, *Mechanical Assistant.*

FELLOWS.

1904-1905.

FREDERICK MADISON ALLIN, A.B.

WALTER WILE HAMBURGER, S.B.

ELIZABETH TOWLE, A.B.

INTRODUCTORY.

Premedical students may profitably elect Courses 1 and 2.

The required or minimal work for medical students includes Courses 12, 13, and 14; it is distributed over three Quarters, beginning in the Winter Quarter of the first year and extending over the Spring Quarter of the first year and the Autumn Quarter of the second year. In these courses special attention will be given to the following points: (1) That the student become familiar with the traditional and classical facts and experiments in Physiology; and (2) that he acquire sufficient knowledge of the recent advances and methods of Physiology to allow him to follow intelligently and accurately the changes necessitated by their probable bearing on medicine. For example, special attention will be given to the application of Physical Chemistry to physiological problems.

The required work in Physiological Chemistry consists of Courses 20 and 25; that in Pharmacology, of Course 21.

For students having finished preliminary work in Physiology or Physiological Chemistry and wishing to do special work in this department, special quarterly courses are offered. Such courses are Nos. 16, 30, 31, 32, 34, 37, 38. These courses consist largely of laboratory work.

Research courses in Physiology, Physiological Chemistry, and Pharmacology are also offered.

COURSES OF INSTRUCTION.

Summer Quarter, 1904 — Spring Quarter, 1905.

M=Minor course—a single course for six weeks. DM=Double Minor course—a double course (two hours daily) for six weeks. Mj=Major course—a single course for twelve weeks. DMj=Double Major course—a double course for twelve weeks.

JUNIOR COLLEGE COURSES.

1 and 2. Elementary Physiology.

These courses are intended to familiarize the student with the elementary facts concerning the structure and functions of the human body. They are not for medical students but are strongly recommended to College students, as a necessary part of an education. Students are urged to take both courses. No prerequisites are demanded for Course 1. Course 1 is prerequisite to Course 2. 1.* Physiology of Circulation, Respiration, Digestion and Absorption.

Lectures: Three a week.

Laboratory: 4 hrs. a week.

Mj. Autumn Quarter.

ASSISTANT PROFESSOR LINGLE AND MR. BROWN.

Repeated Spring Quarter.

ASSISTANT PROFESSOR LINGLE AND MR. BROWN.

Given Summer Quarter. DM. First Term.

MR. BROWN.

2.* Physiology of Metabolism, Muscles, the Nervous System and Senses. A continuation of Course 1.

Lectures: Three a week.

* Either the lectures or the laboratory work of 1 and 2 may be taken as a Major in the Summer Quarter. The laboratory work in this Quarter will be specially adapted to teachers.

Laboratory: 4 hrs. a week.

Mj. Winter Quarter.

ASSISTANT PROFESSOR LINGLE AND DR. ———

Given Summer Quarter. DM. Second Term.

MR. BROWN.

SENIOR COLLEGE COURSES.

12. Physiology of Blood, Circulation, and Respiration.

Mj. Spring Quarter.

Lectures: Two a week. PROFESSOR STEWART.

Recitations: One a week.

ASSISTANT PROFESSOR LINGLE AND OTHERS.

Laboratory: 6 hrs. a week.

ASSISTANT PROFESSOR LINGLE, DR. GUTHRIE,
AND ———.

Prerequisite: *Physiological Chemistry*.

13. Physiology of Digestion, Metabolism, Absorption, Secretion, Muscles and Heat.

1½Mj. Autumn Quarter.

Lectures: Three a week. PROFESSOR STEWART.

Recitations: Two a week.

ASSISTANT PROFESSOR LINGLE AND OTHERS.

Laboratory: 7 hrs. a week.

ASSISTANT PROFESSOR LINGLE
AND ———.

Repeated Summer Quarter, 1904.

PROFESSOR STEWART, DR. GUTHRIE, AND
MR. BROWN.

Prerequisite: *Physiology 12*.

14. Physiology of the Nervous System and the Senses.

Mj. Winter Quarter.

Lectures: Two a week. PROFESSOR STEWART.

Recitations: One a week.

ASSISTANT PROFESSOR LINGLE,
AND OTHERS.

Laboratory: 6 hrs. a week.

ASSISTANT PROFESSOR LINGLE
AND DR. GUTHRIE.

15. Special Physiology of Mammals.

Including the repetition of experiments not given in
the general courses. Saturdays, 8:00-12:30.

½Mj. Summer Quarter.
DR. GUTHRIE.

Repeated Autumn Quarter.

Prerequisite: *Physiology 12 or equivalent*.

16. General and Comparative Physiology.

The phenomena of irritability; the effects of external
conditions on protoplasm. Mj. Spring Quarter.

Prerequisite: *A good knowledge of Chemistry and
Biology*.

20. Physiological Chemistry.

The chemistry of protoplasm; of the foods; of diges-
tion, metabolism, and the excretions.

1½Mj. Winter Quarter.

Lectures: Four a week.

ASSISTANT PROFESSOR MATHEWS.

Recitations: Two a week.

Laboratory: 7 hrs. a week.

ASSISTANT PROFESSOR MATHEWS.

DR. S. A. MATTHEWS, AND MR. MCGUIGAN.

Prerequisite: *General Chemistry and Qualitative
Analysis; elementary Organic Chemistry. Quanti-
tative Analysis is strongly recommended.*

21. Pharmacology.

1½Mj. Spring Quarter.

Lectures: Four a week.

ASSISTANT PROFESSOR MATHEWS.

Recitations: Two a week.

Laboratory: 7 hrs. a week.

ASSISTANT PROFESSOR MATHEWS.

DR. S. A. MATTHEWS AND MR. MCGUIGAN.

Given Summer Quarter, 1904, as 1Mj.

DR. S. A. MATTHEWS.

PRIMARILY GRADUATE COURSES.

30. The Cells and Liquids of the Body in Their Physico-Chemical Relations.

Mj. Autumn Quarter.

PROFESSOR STEWART.

31. Special Physiology of the Circulation.

Mj. Winter Quarter.

PROFESSOR STEWART.

32. Animal Electricity.

Mj. Spring Quarter.

PROFESSOR STEWART.

36. The Action of Drugs on Mammals.

An experimental course to a small number of students
only.

Mj. Autumn Quarter.

DR. S. A. MATTHEWS.

38. The Chemistry of Protoplasm.

(Advanced Course.)

The course will include the isolation of the nucleus,
proteids, and other important constituents of the
proteids, and other important constituents of the cell.

Mj. Autumn Quarter.

ASSISTANT PROFESSOR MATHEWS.

41. Seminar.

At times to be announced.

PROFESSOR STEWART

42. Research Work in Physiological Chemistry.

Mj or DMj. Throughout the year.

ASSISTANT PROFESSOR MATHEWS
AND DR. S. A. MATTHEWS.

43. Research Work in Pharmacology.

Mj or DMj. Throughout the year.

ASSISTANT PROFESSOR MATTHEWS
AND ———.

44. Research Work in Physiology.

Mj or DMj. Throughout the year.
PROFESSOR STEWART.

51. General and Comparative Physiology at the Marine

Laboratory, at Woods Hole, Mass Credit is given
by the University of Chicago for courses taken at
this laboratory. DMj. Summer QuarterASSISTANT PROFESSORS MATHEWS,
LYON, AND OTHERS.

III DEPARTMENT OF CHEMISTRY, PHARMACY, AND TOXICOLOGY.*†

(INCLUDING MATERIA MEDICA: AND COURSES IN DEPARTMENT XX, CHEMISTRY, AT THE UNIVERSITY OF CHICAGO.)

OFFICERS OF INSTRUCTION AT RUSH MEDICAL COLLEGE.

PROFESSOR WALTER S. HAINES, A.M., M.D., *Head of the Department.*

ASSISTANT PROFESSORS JEROME H. SALISBURY, A.M., M.D., JACOB ALLEN PATTON, B.S., M.D.

ASSOCIATE FRANK G. MASON, Ph.G., M.D.

ASSISTANT HERBERT G. VAUGHAN, M.D.

FELLOW EDWARD PAUL FICK, M.D.

OFFICERS OF INSTRUCTION AT THE UNIVERSITY OF CHICAGO.

JOHN ULRIC NEF, Ph.D., *Professor and Head of the Department of Chemistry.*ALEXANDER SMITH, Ph.D., *Professor and Director of General and Physical Chemistry.*JULIUS STIEGLITZ, Ph.D., *Associate Professor of Chemistry.*HERBERT NEWBY MCCOY, Ph.D., *Assistant Professor of Physical Chemistry.*JOHN C. HESSLER, Ph.D., *Instructor in Chemistry.*LAUDER W. JONES, Ph.D., *Instructor in Analytical Chemistry.*WILLIS B. HOLMES, Ph.D., *Associate in Chemistry.*———, *Research Assistant in Chemistry.*EDITH E. BARNARD, S.B., *Assistant in Quantitative Analysis.*JAMES LAWRIE, S.B., *Lecture Assistant in Chemistry.*OSCAR ECKSTEIN, Sc.D., *Research Assistant in Chemistry.*WALTER FULLER, *Laboratory Inspector.*WALTER STANLEY HAINES, A.M., M.D., *Professor of Chemistry, Pharmacy, and Toxicology, Rush Medical College;*
*Professorial Lecturer on Toxicology.*HORACE G. BYERS, Ph.D., *Professor of Chemistry, University of Washington (Summer Quarter, 1904).**For courses in *Physiological Chemistry* see the Department of Physiology

†The courses in Physics recommended to undergraduate students preparing to study medicine (see pp. 33, 34) are the following courses offered in the Department of Physics:

1. General Physics.

A general course in Physics in which mechanics, molecular physics,
and heat are presented mainly from the experimental standpoint.

10 hrs. a week. Mj. Each Quarter.

Summer Quarter; 8:00-10:00.

11:00-1:00.

Autumn Quarter; 8:30-10:30; 11:00-1:00.

ASSISTANT PROFESSOR MANN.

Winter Quarter; 11:00-1:00.

Spring Quarter; 8:30-10:30.

Prerequisite: (Entrance) Physics, or both Majors of Course 0 and

Plane Trigonometry.

2. General Physics.

A continuation of Course 1 covering the subjects of electricity and
light. 10 hrs. a week. Mj. Summer Quarter; 2:00-4:00.

ASSISTANT PROFESSOR MILLIKAN.

Repeated. Mj. Winter Quarter; 8:00-10:00.

ASSISTANT PROFESSORS MILLIKAN AND KINSLEY.

Prerequisite: General Physics 1.

3. General Physics.

A course of lectures and demonstrations intended to complete a
year's work in Junior College Physics. The most important principles
of Physics not treated in Courses 1 and 2 are presented from the
lecture standpoint. 5 hrs. a week. Mj. Summer Quarter; 9:30.

ASSISTANT PROFESSOR MANN.

Mj. Spring Quarter; 9:30.

ASSISTANT PROFESSOR MILLIKAN.

with occasional lectures by PROFESSOR MICHELSON.

Prerequisite: General Physics 1.

More advanced courses are described in the Departmental Announcements of the University.

FELLOWS.

1904-1905.

GEORGE ALONZO ABBOTT, S.B., A.M.
 WAYLAND BLAIR CLARK, S.B., S.M.
 WILLIAM LLOYD EVANS, S.B.

HENRY MAX GOETTSCH, S.B.
 WILLIS STOSE HILPERT, S.B.
 HERMANN IRVING SCHLESINGER, S.B.

INTRODUCTORY.

In this department are offered (1) courses which are suited for providing the preparation in the science of Chemistry that is indispensable to the study and practice of Medicine; (2) courses which afford the student an opportunity for acquiring a more thorough and complete preparation for following intelligently the rapid advances in modern physiology and other medical subjects; and (3) courses which are indispensable for those who intend to assist in this advance by devoting themselves in part or exclusively to research in medical subjects, after completing their medical course.

REQUIREMENTS AND ELECTIVES IN CHEMISTRY.

General and Organic Chemistry are now a prerequisite to the Medical courses proper. The necessary knowledge of the subject can be obtained from Chemistry 1, 2 and 3 and 4 or Admission Chemistry and 1B and 2B and 4 or 1A and 2A (Summer Quarter) 3 and 4.*

Organic Chemistry, 17 (Mj), Summer Quarter, or 14 and 15 (2Mj) may be substituted for Course 4.

Students who are preparing for the study of medicine, and who are also candidates for a bachelor's degree in the University of Chicago, are strongly recommended to take at least two Majors more of Chemistry, viz., Qualitative Analysis, 6 and 7 (see p. 26, II, 1).

Candidates for a bachelor's degree who expect to do research work in Physiology or allied medical subjects may with advantage elect further courses from the following: Quantitative Analysis, 8; Organic Chemistry, 14, 15, and 16; Theoretical Chemistry, 28A and 28B; or Advanced General Chemistry, 23 (see p. 26, II, 2).

COURSES OF INSTRUCTION.

Summer Quarter, 1904 — Spring Quarter, 1905.

M=Minor course—a single course for six weeks. DM=Double Minor course—a double course (two hours daily) for six weeks. Mj=Major course—a single course for twelve weeks. DMj=Double Major course—double course for twelve weeks. Two hours of laboratory work are reckoned as equal to one hour of class-room work.

PRIMARILY FOR THE JUNIOR COLLEGES.

1. Elementary General Chemistry.

Class-room, 3 hrs. a week, 12:00.

Laboratory, 6 hrs. a week.

Mj. Autumn Quarter.

ASSOCIATE PROFESSOR SMITH.

Prerequisite: *Preparatory Physics*.

2. General Inorganic Chemistry I.

Continuation of Course 1 or of Preparatory Chemistry.

Class-room, 3 hrs. a week, 8:30.

Laboratory, 6 hrs. a week.

Mj. Autumn Quarter.

ASSISTANT PROFESSOR MCCOY

AND DR. HOLMES.

Hours as in Course 1. Mj. Winter Quarter.

PROFESSOR SMITH.

3. General Inorganic Chemistry II.

Continuation of Course 2.

Class-room, 3 hrs. a week, 8:30.

Laboratory, 6 hrs. a week.

Mj. Winter Quarter.

ASSISTANT PROFESSOR MCCOY

AND DR. HOLMES.

Hours as in Course 1.

Mj. Spring Quarter.

PROFESSOR SMITH.

1, 2, 3 are consecutive courses. Separate credit is given for each. But students are not advised to take one course only. Students offering preparatory chemistry for admission take Course 2. Whenever the preparation justifies it, qualitative analysis may be substituted for 3.

The aim of the continuous Courses 1, 2, 3 will be to give a definite idea of the fundamental principles of chem-

* Medical students who enter without receiving credit for High School Chemistry are required to take General Chemistry, Courses 1, 2, and 3, or 1A, 2A (2Mj, Summer Quarter) and 3 (Winter or Spring), or 6 (Autumn Quarter), and the lectures on Organic Chemistry, 4 (3Mj). Students entering without organic Chemistry will take Course 4, Autumn Quarter, 1904.

istry, and not to overburden the student with a mass of unconnected facts. The conception of chemical equilibrium and the modern theory of solutions are freely used. The lectures will be experimental to a considerable extent. The courses are designed to meet the wants, not only of those who wish to go deeper into chemistry, but of all who wish to secure a liberal education.

The lectures and class-room work of 1, 2, and 3 may be taken by graduate students without the laboratory work or laboratory fee.

1A. General Inorganic Chemistry.

Elementary Course.

DM. First Term, Summer Quarter.

Class-room, 6 hrs. a week; 10:30.

Laboratory work, 12 hrs. a week; 1:30-4:30.

PROFESSOR BYERS.

Prerequisite: *Preparatory Physics*.

2A. General Inorganic Chemistry.

Continuation of Course 1A. Hours as in 1A.

DM. Second Term, Summer Quarter.

PROFESSOR BYERS.

The lectures and class-room work of 1A and 2A may be taken by Graduate students without the laboratory work or laboratory fee.

1B. General Inorganic Chemistry.—*Special Course.*

DM. First Term, Summer Quarter.

Lectures, 6 hrs. a week, 10:30.

Laboratory work, 12 hrs. a week; 1:30-4:30.

PROFESSOR BYERS.

Prerequisite: *Admission Chemistry and Physics, 1 unit each.*

Students attend the same lectures as in Course 1A, but the laboratory work and recitations in Course 1B are independent and advanced.

2B. General Inorganic Chemistry.—*Special Course.*

Continuation of Course 1B. Hours as in 1B.

DM. Second Term, Summer Quarter.

PROFESSOR BYERS.

For description see under 3.

4. Elementary Organic Chemistry.

Class-room, 3 hrs. a week; 8:30.

Laboratory work, 6 hrs. a week.

Mj. Autumn Quarter.

DR. JONES.

Prerequisite: *Course 3, or 2A, or 2B, General Chemistry.*

PRIMARYLY FOR THE SENIOR COLLEGES.

NOTE.—Courses 6, 7, 8, 9, 10, 11, and 13 are given in the analytical laboratories. The laboratories are open from 8:00 A.M. to 6:00 P.M. (Saturdays only to 1:00 P.M.). The hours of instruction provide for morning and afternoon sections and will be posted in the laboratory.

Courses 8 and 9 will count toward a Master's or the Doctor's degree when Chemistry is the *secondary* subject.

6. Qualitative Analysis.—*Introductory Course.*

Mj or DM. 8 or 16 hrs. a week laboratory.

2 hrs. a week class-room. Lectures, 2:00.

Summer and Autumn Quarters.

ASSOCIATE PROFESSOR STIEGLITZ

AND DR. HOLMES.

Winter Quarter.

DR. JONES.

Spring Quarter.

DR. HOLMES.

Prerequisite: *Course 3, or 2A, or 2B.*

The lectures deal with the chemistry of the analytical reactions, and special attention is given to the development and application of the laws of equilibrium and solutions. This course is, in an important sense, one in advanced general chemistry.

7. Qualitative Analysis.

Continuation of Course 6. Hours as in 6.

Mj or DM. Summer, Autumn, and Spring Quarters.

DR. HOLMES.

Winter Quarter.

DR. JONES.

Courses 6, 7, 10 form a continuous course, which may be begun in any Quarter.

The aim of Courses 6, 7, 10 will be to train the student to do intelligent analytical work based on a knowledge of the scientific principles of the subject and to apply and amplify his knowledge of general and physical chemistry.

8. Quantitative Analysis.—*Introductory Course.*

Chiefly laboratory work in gravimetric and volumetric analysis.

Mj or DM. 8 or 16 hrs. a week, laboratory.

Lecture, 1 hour.

Summer Quarter.

ASSOCIATE PROFESSOR STIEGLITZ

AND DR. ECKSTEIN.

Autumn, Winter, and Spring Quarters.

ASSOCIATE PROFESSOR STIEGLITZ

AND MISS BARNARD.

Prerequisite: *Qualitative Analysis* (Courses 6 and 7).

9. Quantitative Analysis.

Continuation of Course 8, Mj or DM. 10 or 20 hrs.
a week, laboratory. Summer Quarter.

ASSOCIATE PROFESSOR STIEGLITZ
AND DR. ECKSTEIN.
Autumn, Winter, and Spring Quarters.
ASSOCIATE PROFESSOR STIEGLITZ
AND MISS BARNARD.

Courses 8, 9, 11, form a continuous course, which
may be begun in any Quarter.

PRIMARILY FOR THE GRADUATE SCHOOL.

10. Advanced Qualitative Analysis.

Mj or DM. 10 or 20 hrs. a week, laboratory.
Summer, Autumn, and Spring Quarters.
DR. HOLMES.
Winter Quarter.
DR. JONES.

Open to College Students. Continuation of Courses
6 and 7.

11. Advanced Quantitative Analysis.

Mj or DM. 10 or 20 hrs. a week.
Summer and Winter Quarters.
ASSOCIATE PROFESSOR STIEGLITZ.
Continuation of Courses 8 and 9. Open to stu-
dents in the Senior Colleges.

12. Elementary Spectrum Analysis (Qualitative).

Emission (flame and electric spark) and absorption
spectra of inorganic substances. Chiefly laboratory
work. $\frac{1}{2}$ Mj. Winter Quarter.
DR. JONES.

13. Special Methods in Quantitative Analysis.

Chiefly laboratory work.
13A. Electrolytic Methods. $\frac{1}{2}$ Mj or Mj.
13B. Special Mineral Analysis. Mj.
13C. Water Analysis. $\frac{1}{2}$ Mj.
13D. Gas Analysis. $\frac{1}{2}$ Mj.
13E. Organic Elementary Analysis. $\frac{1}{2}$ Mj.
13G. Iron and Steel Analysis. $\frac{1}{2}$ Mj or Mj.
Autumn, Winter, and Spring Quarters.
ASSOCIATE PROFESSOR STIEGLITZ.
Prerequisite: *Quantitative Analysis*, 8 and 9.

13F. Assaying.

Fire-assay of gold, silver, and lead ores.
Mj. Spring Quarter.
MR. ———.

Prerequisite: *General Chemistry, Qualitative and
Quantitative Analysis* (Courses 8 and 9).

14. Organic Chemistry.

Lectures 3 hrs. a week.
Mj. Autumn Quarter; 12:00.
PROFESSOR NEF.
Prerequisite: *General Chemistry and Qualitative
Analysis*.

15. Organic Chemistry.

Continuation of Course 14.
Mj. Winter Quarter; 12:00.
PROFESSOR NEF.

16. Organic Chemistry.

Continuation of Course 15.
M. First Term, Spring Quarter; 12:00.
PROFESSOR NEF.

Courses 14, 15, 16 form a continuous course, covering
the compounds of carbon, including the fatty and the
aromatic series. The aim of the course will be to take
up very thoroughly the simpler compounds, going with
great detail into the chemical behavior, the characteristic
reactions and relationships of the different classes of
organic compounds, and considering with great care the
synthetic methods by which they can be obtained.
Richter's or Bernthsen's *Organic Chemistry* is used as a
reference book, but recent literature will, in special cases,
be considered in detail.

17. General Organic Chemistry.

Fatty and aromatic series.
Lectures, 5 hrs. a week.
Mj (or M. First Term). Summer Quarter; 8:30.
DR. HESSLER.
Prerequisite: *General Chemistry and Qualitative
Analysis*.

18. Elementary Organic Preparations.

Laboratory work; 10 hrs. a week. This course is
arranged to accompany the lectures of Course 17.
It may be taken without the lectures by students who
have had organic chemistry.
 $\frac{1}{2}$ Mj or Mj. Summer Quarter.
DR. HESSLER.

Prerequisite: *As in Course 17*.

19. The Chemistry and Preparation of Medicinal
Drugs.

Dealing with the origin and the physical and chemical
properties of the most important drugs, and their chief
medicinal preparations.
Lectures and Conferences: Tues., Thurs., Fri.,
4:00.

$\frac{1}{2}$ Mj. Spring Quarter.
PROFESSOR HAINES.

- 19A. A Laboratory Course.—Supplementary to Course 19.
Sat., 8:30-1:00.

$\frac{1}{2}$ Mj. Spring Quarter.

PROFESSOR HAINES AND DR. —

20. Organic Preparations.

Laboratory work, 10 or 20 hrs. a week.

Mj or DM. Autumn, Winter, and Spring Quarters.

PROFESSOR NEF.

Summer Quarter.

DR. HESSLER.

Prerequisite: *Qualitative and Quantitative Analysis* and *Organic Chemistry* (it may be taken simultaneously in connection with lectures on Organic Chemistry). A reading knowledge of German is essential.

21. Organic Preparations.

Continuation of Course 20.

Mj or DM. Autumn, Winter, and Spring Quarters.

PROFESSOR NEF.

Summer Quarter.

DR. HESSLER.

22. Organic Preparations.

Continuation of Course 21.

Mj or DM. Autumn, Winter, and Spring Quarters.

PROFESSOR NEF.

Summer Quarter.

DR. HESSLER.

23. Physical Chemistry Applied to Problems in General Chemistry.

2 hrs. a week. $\frac{1}{2}$ Mj.

PROFESSOR SMITH.

Prerequisite: *College Physics, General Chemistry and Qualitative Analysis*.

[Not to be given in 1904-5.]

24. Advanced Inorganic Chemistry.

Two lectures a week on selected topics.

$\frac{1}{2}$ Mj. Winter Quarter.

DR. JONES.

Prerequisite: *General Chemistry and Qualitative Analysis*.

25. Inorganic Preparations.

Laboratory work.

Mj or DM. 10 or 20 hours a week.

Autumn and Winter Quarters.

DR. JONES.

Prerequisite: *Qualitative and Quantitative Analysis, and a reading knowledge of German*.

26. Inorganic Preparations.

Continuation of Course 25.

Mj or DM.

Autumn and Winter Quarters.

DR. JONES.

27. Inorganic Preparations.

Continuation of Course 26.

Mj or DM.

Autumn and Winter Quarters.

DR. JONES.

28A. Elementary Physical Chemistry.—With special reference to Physico-Chemical measurements.

$\frac{1}{2}$ Mj. Summer Quarter.

ASSOCIATE PROFESSOR STIEGLITZ.

$\frac{1}{2}$ Mj. 2 hrs. a week. Spring Quarter.

ASSISTANT PROFESSOR MCCOY.

Prerequisite: *College Physics* (Course 1) and *Qualitative Analysis* (Course 6).

28B. Practical Physical Chemistry.

$\frac{1}{2}$ Mj. Summer Quarter.

ASSOCIATE PROFESSOR STIEGLITZ.

$\frac{1}{2}$ Mj. 5 hrs. a week. Spring Quarter.

ASSISTANT PROFESSOR MCCOY.

Prerequisite: *College Physics* (Course 1), *Qualitative Analysis* (Course 8); Course 28A should accompany or precede this course.

29. Chemical Dynamics.

$\frac{1}{2}$ Mj. 2 hrs. a week.

Autumn Quarter; 12:00.

ASSISTANT PROFESSOR MCCOY.

Prerequisite: *Elementary Physical and Organic Chemistry, including laboratory work; the elements of calculus*.

30. Electro-Chemistry.

$\frac{1}{2}$ Mj. 2 hrs. a week. Winter Quarter.

ASSISTANT PROFESSOR MCCOY.

Prerequisite: *Elementary Physical Chemistry, including laboratory work; the elements of calculus*.

31. Advanced Physical Chemistry.

Laboratory course.

Mj or DM. Autumn, Winter, and Spring Quarters.

ASSISTANT PROFESSOR MCCOY.

Prerequisite: *College Physics, 1 year*. Course 29 should accompany or precede this course.

32. Advanced Physical Chemistry.

Laboratory course. Continuation of Course 31.

Mj or DM. Autumn, Winter, and Spring Quarters.

ASSISTANT PROFESSOR MCCOY.

33. Research Work.

This course will include from 30 to 40 hrs. a week of laboratory work, under the special direction of some one of the instructors in the department. It is expected that research work for a Ph.D. thesis will require 4-6 Quarters, 4-6 DMj.

33a. RESEARCH IN ORGANIC CHEMISTRY.—Autumn, Winter, and Spring Quarters. PROFESSOR NEFF.

33b. RESEARCH IN GENERAL CHEMISTRY.—Autumn, Winter, and Spring Quarters. PROFESSOR SMITH.

33c. RESEARCH IN ORGANIC AND PHYSICO-ORGANIC CHEMISTRY.—Summer, Autumn, Winter, and Spring Quarters. ASSOCIATE PROFESSOR STIEGLITZ.

33d. RESEARCH IN PHYSICAL CHEMISTRY.—Autumn Winter, and Spring Quarters.

ASSISTANT PROFESSOR MCCOY.

Before being admitted to Research, a candidate must satisfy the instructors of the department, by an oral test, or otherwise, that his previous training has been sufficient.

34. Physical Chemistry Applied to Organic Problems.

Lectures 2 hrs. a week. $\frac{1}{2}$ Mj. Spring Quarter.
ASSOCIATE PROFESSOR STIEGLITZ.

Prerequisite: *Organic Chemistry and Elementary Physical Chemistry.*

35. The Carbohydrates and the Terpenes (and their derivatives).

Lectures, 2 hrs. a week.

$\frac{1}{2}$ Mj. Autumn Quarter; 8:30.

ASSOCIATE PROFESSOR STIEGLITZ.

Prerequisite: *Organic Chemistry.*

36. Organic Nitrogen Derivatives.

Uric acid series; pyridine, quinone-imides, and phenazine compounds; a discussion of the alkaloids, pto-

maines, and organic dye-stuffs. — Lectures, 2 hrs. a week. $\frac{1}{2}$ Mj. Winter Quarter; 8:30.

ASSOCIATE PROFESSOR STIEGLITZ.

Prerequisite: *Organic Chemistry.*

37. Special Chapters of Organic Chemistry.

Lectures, 4 hrs. a week.

M. Second Term, Spring Quarter; 12:00.

PROFESSOR NEF.

Prerequisite: *Organic Chemistry.*

38. The Aromatic Series.

Lectures, 2 hrs. a week. $\frac{1}{2}$ Mj. Spring Quarter.

DR. HESSLER.

Prerequisite: *Organic Chemistry.*

40. The Teaching of Chemistry.

A series of conferences and lectures on the didactic of chemistry. $\frac{1}{2}$ Mj. Spring Quarter.

PROFESSOR SMITH.

42. History of Chemistry.

2 hrs. a week. Winter and Spring Quarters.

Two $\frac{1}{2}$ Mj.

[Not to be given in 1904-5.]

43. Club Meetings.

Summer, Autumn, Winter, and Spring Quarters.

VARIOUS MEMBERS OF THE STAFF.

Meetings will be held twice a month. They may be attended by anyone interested, whether connected with the University or not; the subjects for the meetings will be announced at least one week beforehand.

INSTRUCTION AT RUSH MEDICAL COLLEGE.

51. Toxicology.

A conference and laboratory course, dealing with the physical and chemical properties of the more important poisons, their effects and treatment, and their detection. Conferences and Laboratory: Mon., 11:00; Tues., Fri., 10:00-12:00.

PROFESSOR HAINES, ASSISTANT PROFESSOR

SALISBURY AND DR. VAUGHAN.

.8 Mj.

[Not to be given in 1904-5.]

52. Clinical Chemistry.

A lecture, conference, and laboratory course, dealing with the urine, gastric contents, and other animal fluids, in their relation to disease, and embracing the composition of these fluids, the chemical and microscopical detection of abnormal constituents, and the interpretation of their clinical significance.

Lectures, conferences, and laboratory: Mon., 10:00.

Wed., Thurs., 10:00-12:00.

PROFESSOR HAINES, ASSISTANT PROFESSOR

SALISBURY, AND DR. VAUGHAN.

Spring Quarter, 1905. .8 Mj.

Course 52 may be counted as a part of the four required Majors in medicine.

53. Materia Medica and Medical Pharmacy.

A lecture, laboratory, and conference course, dealing with the physical, chemical, and pharmaceutical properties of medicinal agents.

Lectures, Conferences, and Laboratory; Mon., 11:00; Tues., Fri., Sat., 10:00-12:00.

PROFESSOR HAINES AND DRs. MASON AND VAUGHAN.

Autumn Quarter, 1904 and Spring Quarter, 1905.

1 Mj.

54. Principles of Prescribing.

A lecture and conference course, occupying two hours weekly for one term, on the principles of prescription writing.

Classes limited to twenty-four.

ASSISTANT PROFESSOR PATTON
AND DR. MASON.

The first term in each Quarter throughout the year.
Wed., Sat., 10:00. 4 M.

V. DEPARTMENT OF THERAPEUTICS AND PREVENTIVE MEDICINE.

OFFICERS OF INSTRUCTION.

INGALS PROFESSOR, HENRY BAIRD FAVILL.

INSTRUCTOR, JAMES C. GILL.

ASSOCIATES, ANDERS FRICK, EDW. B. HUTCHINSON, C. E. BLOMGREN.

ASSISTANTS, HUGO AD OLDENBORG, J. B. MAHONY.

INTRODUCTORY.

The course in Preventive Medicine will be given to the senior class and will consist of lectures by the head of the department and conferences with the instructors.

The department will give to the junior class a course in the principles of Therapeutics by means of lectures twice a week by the head of the department. One hour in the week will be devoted to recitations in sections conducted by other members of the department upon the application of various therapeutic agents to specific disease problems.

It is intended that this department shall supplement the work of the department of medicine by dealing considerably more in detail with the technique of treatment.

A course in Practical Therapeutics is also offered in which it is intended to demonstrate manipulative methods, including Massage, Electricity, Hydrotherapy, etc.

COURSES OF INSTRUCTION.

Summer Quarter, 1904—Spring Quarter, 1905.

JUNIOR YEAR.

1. Therapeutics.

A lecture and conference course.

Lectures: Tues., Thurs.

Conferences: Sat., 8:00.

Winter Quarter. .6Mj.

PROFESSOR FAVILL, DRS. GILL,
FRICK, HUTCHINSON AND BLOMGREN.

2. Therapeutics.

A lecture and conference course in continuation of Course 1.

Lectures: Tues., Thurs.

Conference: Sat., 8:00.

Spring Quarter. .6Mj.

PROFESSOR FAVILL, DRS. GILL,
FRICK, HUTCHINSON AND BLOMGREN.

3. Practical Therapeutics.

A laboratory and practical course in Massage, Hydrotherapy, Aerotherapy, and special manipulations, given to the class in section.

Tues., Wed., Thurs., 4:00 to 6:00.

Autumn Quarter.

Winter and Spring Quarters. .3Mj.

DRS. GILL, FRICK, MAHONY,
AND MR. OLDENBORG.

4. Prescription Writing.

A didactic and conference course in the art of prescription writing. Given to the class in small sections.

Throughout the year.

Tues., 9:00.

.2Mj.

SENIOR YEAR.

5. Preventive Medicine.

A lecture and conference course.

Tues., Thurs., and Sat., 8:00.

Autumn Quarter. .6Mj.

PROFESSOR FAVILL.

6. The Therapeutics of Nervous Diseases.

A recitation course.

Sat., 8:00.

Summer Quarter. .2Mj.

DR. GILL.

VI. THE DEPARTMENT OF PATHOLOGY AND BACTERIOLOGY.

AT THE UNIVERSITY DEPARTMENT XXVIII.

OFFICERS OF INSTRUCTION.

LUDVIG HEKTOEN, M.D., *Professor of Pathology, and Head of the Department of Pathology and Bacteriology.*
 EDWIN OAKES JORDAN, PH.D., *Associate Professor of Bacteriology.*
 H. GIDEON WELLS, PH.D., M.D., *Assistant Professor of Pathology.*
 HOWARD TAYLOR RICKETTS, A.B., M.D., *Instructor in Pathology.*
 BROWN PUSEY, M.D., *Instructor in the Pathology of the Eye.*
 NORMAN MACLEOD HARRIS, M.B., *Instructor in Bacteriology.*
 RAGNHILD GULBRENSON, *Technical Assistant in Pathology.*
 THOR ROTHSTEIN, A.B., M.D., *Research Assistant in Neuropathology.*
 MARY HEFFERAN, PH.D., *Curator of the Bacteriological Museum.*

AT RUSH MEDICAL COLLEGE.

EDWIN RAYMOND LE COUNT, M.D., *Associate Professor of Pathology.*
 GEORGE H. WEAVER, M.D., *Assistant Professor of Pathology.*
 PETER BASSOE, M.D., *Associate in Pathology.*

FELLOWS.

1904-1905.

JOHN R. BARBER, M.D. (Pathology).
 DAVID JOHN DAVIS, B.S. (Pathology).
 W. H. MANWARING, M.D. (Pathology).

DUDLEY WATSON DAY (Bacteriology).
 GEORGE BERTRAND SMITH, S.B. (Bacteriology).
 ALVIN MARTIN STOBBER, M.D. (Pathology).

INTRODUCTORY.

The courses offered by the Department include such as cover the required work in Pathology and Bacteriology in the curriculum of medicine, as well as advanced courses arranged for those desiring a more extended knowledge of the subjects, and for those wishing to qualify themselves for research.

At the University of Chicago the Department possesses all necessary equipment for pathologic and bacteriologic work. There is access to a good museum for teaching purposes, and to complete files of the important serial publications. Any recent standard text-book may be used for the courses in this department.

For each Major or Double Minor Course requiring laboratory work the laboratory fee is \$2.50.

The Pathological Laboratory of Rush Medical College possesses about one hundred microscopes, some fourteen microtomes, and all necessary equipment for pathologic and bacteriologic work. The laboratory has a good museum for teaching purposes and a special departmental library containing complete files of the important pathological and bacteriological journals in the English, French, and German languages. Adjacent hospitals furnish abundant material for demonstration, advanced work, and research.

COURSES OF INSTRUCTION.

Summer Quarter, 1904—Spring Quarter, 1905.

M=Minor course=a single course for six weeks. DM=Double Minor course=a double course (two hours daily) for six weeks. Mj=Major course=a single course for twelve weeks. DMj=Double Major course=a double course for twelve weeks.

SENIOR COLLEGE COURSES.

1. General Bacteriology.

General aspects of Bacteriology. Laboratory practice in the essentials of bacteriological methods.

$\frac{1}{2}$ Mj. Summer Quarter; 1:30-4:30.

DR. HARRIS.

Repeated in Autumn Quarter.

Sec. a, daily 2:00-4:00.

Sec. b, daily 11:00-1:00.

ASSOCIATE PROFESSOR JORDAN,
 DR. HARRIS, AND ASSISTANTS.

2A. General Pathology and Pathological Histology.

A practical laboratory course in general pathologic histology, supplemented by experiment, by lantern demonstrations, and by the study of fresh and museum specimens, by recitations in general pathology.

1Mj. Winter Quarter.

PROFESSOR HEKTOEN, DR. RICKETTS,
 AND ASSISTANTS.

Recitations: Two hours a week.

Laboratory: Eight hours a week.

Prerequisite: *Histology, Bacteriology, and Physiological Chemistry.*

2B. General Pathology and Pathological Histology.

Continuation of 2A in Spring Quarter. Mj.

In the Summer Quarter, 1904, Course 2 will be given as 1½Mj. DR. RICKETTS.

3. Lectures in General Pathology.

Supplementary to Course 2B. ½Mj. Spring Quarter.

THE INSTRUCTORS OF THE DEPARTMENT.

4. Advanced Bacteriology.

Mj.

Open to a limited number of specially prepared students and graduates in medicine. Lectures on specially selected topics. Repeated each Quarter.

Hours to be arranged.

ASSOCIATE PROFESSOR JORDAN
AND DR. HARRIS.

5. Public Hygiene.

The applications of Bacteriology to municipal hygiene. Water supply, food supply, sewage disposal, etc.

Mj. Spring Quarter.

ASSOCIATE PROFESSOR JORDAN.

7. Scientific Foundations of Public Health.

A non-technical course in the simpler fundamental facts underlying the science of Public Health. The course is planned largely to meet the needs of secondary school teachers, and includes laboratory exercises in some of the simpler problems of bacteriology, pathology, and clinical medicine.

Mj. (M. First Term). Summer Quarter, 1904.

DR. MANWARING.

GRADUATE COURSES.**8. Pathology of the Eye.**

Special advanced pathology for practicing physicians and advanced students.

DM. First Term, Summer Quarter.

Hours arranged for each student.

DR. PUSEY.

[Not to be given in 1904.]

9. Advanced Pathology.

Open to a limited number of students who have credit in general pathology. Laboratory work will be given in pathological technique, the study and recording of autopsies, and special pathological material.

Weekly conferences.

Mj or DMj. Each Quarter.

Hours arranged for each student.

Summer Quarter.

ASSISTANT PROFESSOR WELLS.

Autumn, Winter, and Spring Quarters.

DR. RICKETTS.

10. Research in Pathology.

Open to a limited number of specially qualified students and graduates in medicine.

Mj or DMj. Each Quarter.

Hours to be arranged for each student.

PROFESSOR HEKTOEN, ASSISTANT PROFESSOR
WELLS, AND DR. RICKETTS.

11. Research in Bacteriology.

Mj or DMj. Each Quarter.

ASSOCIATE PROFESSOR JORDAN
AND DR. HARRIS.

12A. Special Pathology.

A course of recitations, with demonstrations of anatomical specimens, on the pathological processes of the different viscera. ½Mj. Summer Quarter.

Hours to be arranged.

ASSISTANT PROFESSOR WELLS.

Prerequisite: *General Pathology*.

12B. Laboratory Course.

Supplementary to 12A. ½Mj. Summer Quarter.

Hours arranged for each student.

ASSISTANT PROFESSOR WELLS.

13A. Laboratory Course in Immunity.

Immunization of animals. Cytolysis (including hemolysis and bacteriolysis), agglutination, toxins and antitoxins, etc. An experimental course.

½Mj or M. Summer Quarter.

Hours to be arranged.

DR. RICKETTS.

Prerequisite: *Bacteriology*.

13B. Lecture Course in Immunity.

This will include a consideration of the theories of immunity, the reactions and substances concerned, and the present status of immunity in various infectious diseases; also compensation and adaptation in disease processes.

Supplementary to 13A, but may be taken independently. ½Mj or M. Summer Quarter.

Hours to be arranged. DR. RICKETTS.

Prerequisite: *Bacteriology*.

14. Bacteriology of Autopsies.

Open to a limited number of students. Study will be made of bacteriological material obtained at autopsies. Conferences weekly. This course is associated with Course 9.

Mj. Each Quarter.

ASSOCIATE PROFESSOR WELLS, DR. RICKETTS
AND HARRIS.

16. Sanitary Aspects of Milk Supply.

Practice in laboratory methods of the examination of milk. Mj. Winter Quarter.

Hours to be arranged. DR. HARRIS.

Prerequisites: *Chemistry and Bacteriology*.

17. The Pathogenic Protozoa.

½Mj. Spring Quarter.
DR. HARRIS.

Hours to be arranged.

JUNIOR AND SENIOR COURSES (RUSH).

12. Special Pathologic Anatomy and Histology.

Limited to forty students. Practical instruction is given in the methods of making post-mortem examinations and of recording the results. The student studies and describes the gross and microscopic appearances of diseased organs and tissues. Bacteriologic and chemic methods and experiments are employed whenever indicated, and the clinical relations (pathologic physiology) of the morbid conditions are emphasized.

Daily, 1:00-3:00, except Saturday. Mj.

Summer Quarter.

DRS. STOBER AND DAVIS.

Autumn Quarter.

ASSOCIATE PROFESSOR LECOUNT

AND DR. DAVIS.

Winter Quarter.

DRS. BASSOE AND STOBER.

Spring Quarter.

DRS. BASSOE AND STOBER.

13. The Histology and Diagnosis of Tumors.

Daily, 3:00-5:00. M.

Second Term, Autumn Quarter.

ASSOCIATE PROFESSOR LECOUNT.

Second Term, Winter Quarter.

DR. BASSOE.

14. Microscopic Technic.

A course in Histologic (Normal and especially Pathologic) Technic, which will include the methods of hardening and fixation of tissues, infiltration and sectioning, the ordinary staining methods, the special selective stains and the staining of bacteria in tissues.

Mon., Wed., Fri., 3:00-5:00. M.

First Term, Autumn Quarter.

ASSOCIATE PROFESSOR LECOUNT.

First Term, Winter Quarter.

DR. BASSOE.

15. Chemical Pathology.

The Physics and Chemistry of Pathologic Processes. A lecture course covering the subject of general pathology from the chemical standpoint, and also certain of the diseases of intoxication. M.

Winter Quarter.

ASSISTANT PROFESSOR WELLS.

[Not to be given in 1905.]

17. Advanced Laboratory Work and Research in Pathology.

Open to a limited number of specially qualified students and graduates in medicine.

Hours arranged for each student. Credit given based on time and quality of work.

Throughout the year.

PROFESSOR HEKTOEN

AND ASSOCIATE PROF. LECOUNT.

18. General Pathology.

A lecture course with demonstrations.

First Term, Winter Quarter. M.

ASSOCIATE PROFESSOR LECOUNT

AND DR. BASSOE.

Hours to be announced.

19. A Course in Practical Work in Pathology and Bacteriology.—With special reference to general practice.

Daily, 10:00-1:00.

Second Term, Winter Quarter. M.

DRS. RICKETTS AND DAVIS.

Limited to 24 students.

20. Pathology of the Nervous System.

A laboratory course in the pathology of the nervous system.

Daily, except Saturday, 3:00-5:00. M.

Limited to ten students.

Second Term, Winter Quarter.

DR. BASSOE.

Prerequisites: *Courses 2 and 12*.

VII. DEPARTMENT OF MEDICINE.

OFFICERS OF INSTRUCTION.

PROFESSORS FRANK BILLINGS, HENRY M. LYMAN, DANIEL R. BROWER, JOHN M. DODSON, JAMES B. HERRICK.

ASSOCIATE PROFESSOR ALFRED C. COTTON.

ASSISTANT PROFESSORS BERTRAM W. SIPPY, B. M. LINNELL, ISAAC ABT.

INSTRUCTORS S. R. SLAYMAKER, JOSEPH A. CAPPS, WILLIAM J. BUTLER, F. S. CHURCHILL, THOMAS R. CROWDER, JOSEPH L. MILLER, JAMES ALEXANDER HARVEY, JAMES C. GILL, GEORGE W. HALL.

ASSOCIATES J. W. VANDERSLICE, WILLIAM L. WILSON, ALEXANDER F. STEVENSON, JULIA D. MERRILL, JOSEPHINE YOUNG, THEODORE TIEKEN.

ASSISTANTS WILLIAM W. MELOY, M. M. PORTIS, J. M. WASHBURN, A. A. SMALL, A. D. KOHN, ALEXANDER C. SOPER, JR., MICHAEL L. GALLAGHER, W. H. WALKER, ISIDORE B. DIAMOND, JAS. C. FRIEDMAN, BATHENA COONE, R. E. GREEN, A. C. McCLANAHAN, JOS. H. OTRADOVEC, WM. R. STEPHENS, W. R. TYNDALE, ROLLIN WOODYATT, CHAS. O. HOIBY, CHAS. A. WADE, CAROLINE HEDGES, O. M. STEFFENSON, S. KRUMHOLZ.

FELLOW, LEO M. LOEB.

EXTRA-MURAL TEACHERS.

AT THE WEST SIDE HEBREW DISPENSARY.

ASSISTANT CLINICAL PROFESSOR (*extra-mural*) ROSA ENGELMAN.

ASSISTANT CLINICAL PROFESSOR (*extra-mural*) SIDNEY KUH.

CLINICAL INSTRUCTOR (*extra-mural*) A. W. SCHRAM.

CLINICAL ASSISTANTS (*extra-mural*) MAY MICHAEL, FRANK B. HARMISON.

AT THE CHICAGO ISOLATION HOSPITAL.

ASSISTANT CLINICAL PROFESSOR (*extra-mural*) HEMAN SPALDING.

AT THE ALEXIAN BROTHERS' HOSPITAL.

ASSISTANT CLINICAL PROFESSOR, J. H. HOELSCHER.

AT ST. ANTHONY'S HOSPITAL.

CLINICAL INSTRUCTOR (*extra-mural*) FRED J. E. EHRMANN.

COURSES OF INSTRUCTION.

Summer Quarter, 1904—Spring Quarter, 1905.

JUNIOR YEAR.

1. The Anatomy, Physiology, and Hygiene of Infancy.

A recitation and conference course.

Mon., Wed., Fri., 9:00.

First Term, Summer Quarter. .6M.

First Term, Spring Quarter.

DR. BUTLER.

2. General Symptomatology.

A recitation and conference course.

Mon., Wed., Fri., 9:00. .6M.

Second Term, Summer Quarter.

DR. PORTIS.

3. Diseases of the Blood, and Infectious Diseases.

A recitation and conference course.

Mon., Wed., Fri., 9:00.

Autumn Quarter. .6Mj.

DRS. SLAYMAKER, HARVEY,

HALL, WILSON.

4. Diseases of the Alimentary Tract, of the Liver, and General Diseases.

A recitation and conference course.

Mon., Wed., Fri., 9:00. Winter Quarter. .6Mj.

DRS. SLAYMAKER, HARVEY,
HALL, WILSON.

5. Diseases of the Kidney and of the Nervous System and General Diseases.

A recitation and conference course.

Mon., Wed., Fri., 9:00. Spring Quarter. .6Mj.

DRS. SLAYMAKER, HARVEY,
HALL, WILSON.

Any recent standard text-book on the Practice of Medicine may be used for Courses 2, 3, 4, and 5.

6. A Clinical Course.

In the Central Free Dispensary throughout the year.

Daily, 10:00-12:00 1.2M.

In sections, two months for each section, one month in the department of Internal Medicine, and two weeks each in the departments of Neurology and of Paediatrics.

SENIOR YEAR.

7. **The Disorders of Nutrition in Infancy and Childhood.**
A clinical course.
Tues., Fri., 10:00-12:00.
Summer Quarter. .6Mj.
ASSOCIATE PROFESSOR COTTON.
8. **Clinical Medicine.**
A clinical and conference course in general medicine with a special reference to infectious diseases.
Mon., Thurs., 10:00-12:00. .6Mj
Autumn Quarter.
PROFESSOR BILLINGS
AND DRS. CAPPS AND MILLER.
9. **Clinical Medicine.**
Clinical and conference course in general medicine with especial reference to diseases of the spinal cord and peripheral nerves.
Mon., Thurs., 10:00-12:00. .6Mj.
Winter Quarter.
PROFESSOR BILLINGS
AND DRS. CAPPS AND MILLER.
10. **Clinical Medicine.**
A clinical and conference course in general medicine with especial reference to diseases of the blood and ductless glands.
Mon., Thurs., 10:00-12:00. .6Mj.
Spring Quarter.
PROFESSOR BILLINGS
AND DRS. CAPPS AND MILLER.
Summer Quarter, diseases of the blood and blood-vessels. PROF. BILLINGS AND DR. MILLER.
11. **Clinical Medicine.**
A clinical and conference course in general medicine.
Summer Quarter, general symptomatology and the infectious diseases.
11, T. Autumn Quarter, diseases of the kidney and the vascular system.
11, W. Winter Quarter constitutional diseases and diseases of the ductless glands.
11, S. Spring Quarter, diseases of the brain and spinal cord.
Tues., Fri., 10:00-12:00 Tues. at the Cook County Hospital, Fri. in the College Amphitheater.
Each Quarter. .6Mj.
PROFESSOR HERRICK AND ASSISTANTS.
12. **The Eruptive Diseases of Infancy and Childhood.**
A clinical and conference course.
Tues., Fri., 10:00-12:00.
Autumn Quarter. .6Mj.
PROFESSOR DODSON.
13. **Clinical Medicine.**
A clinical and conference course in general medicine.
Summer Quarter, Diseases of the alimentary tract, 13, F. Autumn Quarter. Diseases of the alimentary tract.
13, W. Winter Quarter. Diseases of the kidney and vascular system.
13, S. Spring Quarter. Rheumatism and allied disorders.
Wed., Sat., 10:00-12:00.
Each Quarter. .6Mj.
ASSISTANT PROF. SIPPY AND ASSISTANTS.
14. **Clinic on Nervous Diseases.**
Students may register for any one, two or all three days and receive respectively, .2, .4, or .6Mj.
Mon., Wed., Fri., 10:00-12:00. Each Quarter.
PROF. BROWER AND ASSISTANTS.
15. **Diseases of the Respiratory Tract of Infancy and Childhood.**
A lecture and clinical course.
Tues., Fri., 10:00-12:00. Winter Quarter. .6Mj.
ASSOCIATE PROF. COTTON.
16. **Physical Diagnosis of Infancy and Childhood.**
A recitation and conference course, limited to twenty-four students.
Mon., Wed., 9:00.
First Term, Winter Quarter. .4M
DR. J. W. VANDERSLICE.
17. **Pediatrics.**
A clinical course at the Cook County Hospital, limited to twelve students.
Mon., Wed., 9:00.
Autumn, Winter, and Spring Quarters. .2Mj.
DR. CHURCHILL.
19. **The Nervous Diseases of Infancy and Childhood.**
A clinical and lecture course.
Tues., Fri., 10:00-12:00.
Spring Quarter. .6Mj.
PROFESSOR DODSON.
21. **Clinical Course at Cook County Hospital.**
In Autumn, Winter, and Spring Quarters, to follow the quiz in general medicine; Summer Quarter, acute infectious diseases. Limited to 18 students each quarter.
Thurs., 10:00-12:00. .3Mj.
DR. SLAYMAKER.
- 21A. A course similar to the above given Sat., from 10:00-12:00. During the Summer Quarter the special topic will be diseases of the kidney and of the vascular system. .3Mj.
DR. MILLER.

22. Mental and Nervous Diseases.

A didactic and clinical course at the Cook County Hospital on insanity and diseases of the nervous system, including conferences and clinical lectures at the Hospital for Insane at Elgin, Kankakee or Dunning.

Fri., 4:00-6:00 throughout the year.

Each Quarter. .3Mj.
PROFESSOR BROWER.

23. Cook County Hospital Clinic.

In sections of six. Each Quarter. .2Mj.
Sat., 8:00-10:00.

ASSISTANT PROF. LINNELL.

23A. Cook County Hospital Clinic.

Similar to course 23. Limited to six students. Summer and Autumn Quarters. .2Mj.
Thurs., 8:00-10:00.

DR. HARVEY.

24. Laboratory Diagnosis.

A laboratory course in the chemical, microscopical, and bacteriological examination of blood, urine, sputum, gastric contents, feces, secretions, exudates, etc., and their pathologic and clinical significance, especial attention being given to their bearing upon diagnosis. Each class limited to 24 men. Repeated each term of six weeks throughout the year.

Tues., Wed., Fri., Sat., 10:00-12:00. .4M.

This course is also offered to the students of the junior class, at the following hours:

Winter Quarter, 1905, each term, Mon., Thurs., 1:00 to 3:00.

Spring Quarter, 1905, each term, Mon., Thurs., 1:00 to 3:00.

DRS. CROWDER, FRIEDMAN, SMALL, LOEB,
TYNDALE, SOPER.

25. Diseases of the Stomach.

A clinical and laboratory course, limited to 12 students. About three-fourths of the course will be devoted to the practical examination of patients in the Central Free Dispensary, and the remainder to Laboratory investigation.

Wed., Sat., 10:00-12:00.

First Term, Summer Quarter. .4M.
ASSISTANT PROF. SALISBURY.

26. Seminar in Classics of Medical Literature.

In this course classic contributions to medical literature will be studied by means of reading, essay-writing, conference, and discussion. The number of students taking this course will be limited to twelve.

For 1905 the subjects taken up will be:

1. Laennec on Diseases of the Chest, selected chapters.
2. Addison on Diseases of the Suprarenal Capsule.
3. Report of the London Clinical Society on Myxoedema.
4. Koch on the Bacillus of Tuberculosis.
5. Selections from Trousseau's Clinical Medicine.
6. Gerhard on Typhoid Fever.

Copies of these works in English will be found in the Rush Medical College Library.

Hours to be announced. Winter Quarter. .2 to 1Mj.
PROFESSOR HERRICK.

27. A Clinical Course at Cook County Hospital.

In Autumn, Winter, and Spring Quarters, to follow the quiz in General Medicine.

Thurs., 7:00-8:00 (throughout the year). .2Mj.
ASST. PROF. SIPPY AND DR. HALL.

28. Medical Tuberculosis.

A lecture and clinical course. The class will be taken into hospital wards.

Tues., Thurs., 9:00.

First Term, Autumn Quarter. .4M.
EMERITUS PROF. BRIDGE.

30. (*Extra-mural*.) Course in Clinical Pediatrics.

At the West Side Hebrew Dispensary.

Mon., Thurs., 4:00-6:00 (throughout the year).

Each section one term. .4M.

ASST. CLINICAL PROF. ISAAC ABT,
DR. MAY MICHAEL.

Students taking this course should register also for Course X-15.

31. (*Extra-mural*.) Course in Clinical Pediatrics.

At the West Side Hebrew Dispensary.

Wed., Sat., 2:00-4:00 (throughout the year).

Each section one term. .4M.

ASST. CLINICAL PROF. ROSA ENGELMAN.
Students taking this course should register also for Course VIII-18.

32. (*Extra-mural*.) Course in Clinical Neurology.

At the West Side Hebrew Dispensary.

Wed., Sat., 4:00-6:00, Autumn, Winter and Spring Quarters.

Each section one term. .4M.

ASST. CLINICAL PROF. SIDNEY KUH.
Students taking this course should register also for Course XI-8.

33. (*Extra-mural*.) Variola.

A clinical course in Variola, at the Chicago Isolation Hospital, at intervals as material is afforded.

Classes limited to ten each. .2M.

ASST. CLINICAL PROF. HEMAN SPALDING.

34. (*Extra-mural.*) **A Course in Clinical Medicine.**
At St. Luke's Hospital, limited to small groups.
Wed. 4:00-6:00. .2Mj.
PROFESSOR HENRY B. FAVILL.
Students taking this course should register also for
VIII-17.
35. (*Extra-mural.*) **A Clinical Course in General
Medicine.**
At the West Side Hebrew Dispensary. Each course
extends over six weeks. Limited to eight students
each term.
Wed., Sat., 4:00-6:00.
Winter and Spring Quarters. .4M.
DR. ALBERT W. SCHRAM.
36. (*Extra-mural.*) **A Clinical Course.**
At St. Anthony's Hospital, corner Douglas boulevard
and Nineteenth street. Limited to eight students,
each term. .6M.
Mon., Wed., 1:00-4:00.
DR. FRED J. E. EHMAN.
Students taking this course should register also for
Course VIII-21.
37. (*Extra-mural.*) **A Clinical Course.**
At Alexian Brothers' Hospital, Belden and Racine
avenues. Limited to eight students each Quarter.
Tues., Thurs., 10:00-12:00. .4Mj.
ASST. CLINICAL PROF. HOELSCHER.
Students taking this course should register also for
Course VIII-22.
39. **A General Clinic in Pediatrics.**
At the Cook County Hospital.
Sat., 3:00-4:30. .1Mj.
ASST. PROF. ABT.
40. **Clinical Neurology.**
At the Cook County Hospital.
Tues., 2:00-3:00. .1Mj.
DR. KUH.
41. **Clinical Diagnosis Course.**
A course in bedside instruction, including all necessary
chemical, microscopical and bacteriological examina-
tions of blood, urine, sputum, gastric contents, feces,
etc. Limited to six students, each quarter throughout
the year.
Tues., Fri., 10:00-12:00. .4Mj.
ASST. PROF. LINNELL.
42. **Course in Topical Diagnosis.**
Limited to six.
Mon., Thur. 10:00-12:00. .4Mj.
Autumn Quarter, DR. CAPPS.
Spring Quarter, DR. MILLER.
43. (*Extra-mural.*) **A Clinical and Conference Course.**
At the West Side Hebrew Dispensary, on the diagnosis
and treatment of diseases of the stomach and intes-
tines. Each term.
Tues., Sat., 10:00-12:00. .4M.
DR. A. D. KOHN.

VIII. DEPARTMENT OF SURGERY.

OFFICERS OF INSTRUCTION.

PROFESSOR NICHOLAS SENN.

PROFESSOR ARTHUR DEAN BEVAN.

ASSOCIATE PROFESSOR WM. T. BELFIELD.

ASSOCIATE PROFESSOR IN DENTAL SURGERY TRUMAN W. BROPHY.

ASSOCIATE CLINICAL PROFESSOR D. W. GRAHAM.

ASSISTANT PROFESSORS ALBERT I. BOUFFLEUR, FREDERIC S. COOLIDGE, EMANUEL J. SENN.

INSTRUCTORS CHARLES A. PARKER, FRANK W. JAY, J. A. PATTON.

ASSOCIATES KARL DOEPFNER, EMANUEL J. FRIEND, WM. SENN, THOS. R. CROWDER.

ASSISTANTS DRS. DONLON, RYERSON, DOANE, PARKES, R. H. HERBST, A. C. BERTLING, J. F. GRASSE.

AT ST. LUKE'S HOSPITAL.

ASSISTANT CLINICAL PROFESSOR (*extra-mural*) LEWIS L. MACARTHUR.

AT THE COOK COUNTY HOSPITAL.

ASSISTANT CLINICAL PROFESSOR (*extra-mural*) A. E. HALSTED.

AT THE ALEXIAN BROTHERS' HOSPITAL.

ASSISTANT CLINICAL PROFESSOR (*extra-mural*) MALCOLM L. HARRIS. .

AT ST. ANTHONY'S HOSPITAL.

ASSISTANT CLINICAL PROFESSOR (*extra-mural*) LAWRENCE RYAN.

AT THE WEST SIDE HEBREW DISPENSARY.

ASSISTANT CLINICAL PROFESSORS (*extra-mural*) EMANUEL FRIEND, LOUIS A. GREENSFELDER.CLINICAL ASSISTANTS (*extra-mural*) JOHN LANG, W. H. RUBOVITZ, CHAS. J. SCHOENFELD.

COURSES OF INSTRUCTION.

Summer Quarter, 1904 — Spring Quarter, 1905.

JUNIOR YEAR.

*1. Principles.

Recitation and conference course.

Mon., Wed., Fri., 8:00.

Summer and Autumn Quarters. .6Mj.

DRS. DOEPFNER, DONLON, RYERSON, RYAN.

*2. Principles and Practice of Surgery.

A recitation and conference course.

Mon., Wed., Fri., 8:00.

Winter Quarter. .6Mj.

DRS. DOEPFNER, DONLON, RYERSON, RYAN.

*3. Practice of Surgery.

A recitation and conference course.

Mon., Wed., Fri., 8:00. Spring Quarter. .6Mj.

DRS. DOEPFNER, DONLON, RYERSON, RYAN.

4. Surgical Anatomy.

Course with demonstrations and drawings of the extremities.

Tues., Fri., 11:00. Autumn Quarter. .4Mj.

DRS. PARKER AND OLNEY.

5. Surgical Anatomy.

Course with demonstrations and drawings of the abdomen and pelvis.

Tues., Fri., 11:00.

Winter Quarter. .4Mj.

DRS. PARKER AND OLNEY.

6. Surgical Anatomy.

Course with demonstrations and drawings of the head, neck, and thorax.

Tues., Fri., 11:00.

Spring Quarter. .4Mj.

DRS. PARKER AND OLNEY.

7. Demonstration Course in Bandaging.

A practical course in bandaging.

Mon., Tues., Wed., 3:00-5:00.

Six weeks for each section; throughout each Quarter.

.4M.

DR. PARKER.

8. Clinical Surgery. Central Free Dispensary.

Daily, 1:00-3:00.

Throughout the year; one month for each section.

.M.

DRS. JAY, FRIEND, DOANE.

* The text-books required for Courses 1, 2, and 3, are Senn's *Principles of Surgery*, Senn's *Tumors*, Senn's *Emergency and Minor Surgery*, and Von Esmarch's and Kowalzig's *Operative Surgery*, edited by Senn.

SENIOR YEAR.

9. **A Lecture Course.**
Dealing with the surgery of the abdomen.
Mon., Wed., Fri., 9:00.
Autumn Quarter. .6Mj.
PROFESSOR BEVAN.
Including a course in surgery of the urinary organs
by ASSOCIATE PROFESSOR BELFIELD.
10. **A Lecture Course.**
Concluding surgery of abdomen and taking up surgery
of the thorax.
Mon., Wed., Fri., 9:00.
Winter Quarter. .6Mj.
PROFESSOR BEVAN.
Including a course in rectal surgery by
ASSISTANT PROFESSOR E. J. SENN.
11. **A Lecture Course.**
Dealing with surgery of the head and neck.
Mon., Wed., Fri., 9:00.
Spring Quarter. .6Mj.
PROFESSOR BEVAN.
12. **A Lecture Course.**
Consisting of lectures on general surgery.
Mon., Wed., 8:00.
First Term, Summer Quarter. .4M.
ASSISTANT PROFESSOR E. J. SENN.
13. **A Practical Course in Operative Surgery.**
On the cadaver and in surgical appliances, given to the
class in sections.
Tues., Wed., Fri., 4:00-6:00. .6M.
Repeated each term of the Autumn and Winter
Quarters and the First Term of the Spring Quarter.
Operative surgery.
Autumn and Winter Quarters.
ASSISTANT PROFESSOR BOUFFLEUR.
Surgical Appliances and Bandaging.
DR. PARKER.
14. **College Clinics.**
Tues., Thurs., 2:00-5:00.
Sat., 2:00-5:00. .6Mj.
PROFESSOR SENN.
ASSOCIATE CLINICAL PROFESSOR GRAHAM.
15. **Clinic at Cook County Hospital.**
Thurs., 8:00-10:00 P. M. .4Mj.
Autumn Winter, and Spring Quarters. .2Mj.
ASSISTANT PROFESSOR BOUFFLEUR.
16. **Dental Surgery.**
A lecture by
ASSOCIATE PROFESSOR BROPHY.
Mon., Wed., Thurs., 8:00.
First Term, Winter Quarter. .6M.
17. (*Extra-mural.*) **A Course in Clinical Surgery.**
At St. Luke's Hospital classes limited to eight each
quarter.
Wed., 2:00-4:00. .2Mj.
ASSISTANT CLINICAL PROFESSOR MACARTHUR.
Students taking this course should register also for
Course VII-34.
18. (*Extra-mural.*) **A Course in Clinical Surgery.**
At the West Side Hebrew Dispensary, classes limited
to eight students.
Wed., Sat., 4:00-6:00. .4M.
Each course extends over one term.
ASSISTANT CLINICAL PROFESSOR FRIEND.
Students taking this course should register also for
Course VII-31.
19. (*Extra-mural.*) **A Course in Clinical Surgery.**
At the West Side Hebrew Dispensary limited to eight
students each term.
Mon., Thurs., 4:00-6:00. .4M.
ASST. CLINICAL PROFESSOR GREENSFELDER.
Students taking this course should register at the
same time for Course XI-7.
20. (*Extra-mural.*) **A Course in Clinical Surgery.**
At the Cook County Hospital, classes limited to twelve
students. Throughout the year.
Thurs., 4:00-6:00. .4M.
ASSISTANT CLINICAL PROFESSOR HALSTED.
21. (*Extra-mural.*) **A Course in Clinical Surgery.**
At St. Anthony's Hospital, classes limited to eight
students.
Wed., 1:00-3:00. Each term. .2M.
ASSISTANT CLINICAL PROFESSOR RYAN.
Students taking this course should register also for
Course VII-36.
22. (*Extra-mural.*) **A Course in Clinical Surgery.**
At the Alexian Brothers' Hospital, limited to eight
students each Quarter.
Tues., Thurs., 8:00-10:00 A. M. .4Mj.
ASSISTANT CLINICAL PROFESSOR HARRIS.
Students taking this course should register also for
Course VII-37.
23. **Morning Surgery Clinic.**
Tues., Fri., 10:00-12:00 A. M. .4Mj.
Autumn, Winter, and Spring Quarters.
PROFESSOR BEVAN.

IX. DEPARTMENT OF OBSTETRICS AND GYNECOLOGY.

PROFESSOR J. CLARENCE WEBSTER.

ASSISTANT CLINICAL PROFESSOR CHAS. E. PADDOCK.

INSTRUCTORS: RUDOLPH W. HOLMES, HENRY F. LEWIS, A. BELCHAM KEYES, PALMER FINDLEY, FRANK W. LYNCH.

ASSOCIATE: FRANK D. PIERCE.

ASSISTANTS: WALLACE F. GROSVENOR, CAREY CULBERSON, D. P. JOHNSON.

CLINICAL ASSISTANTS: H. L. HUKILL, M. O. PORTER, I. RASMUSSEN, MARIE SCHMIDT.

INTRODUCTORY.

The subject of Obstetrics is taught by lecture and conference course in the Junior Year, a practical course in obstetric manipulations upon the manikin, and by clinical conferences in which the class, in small sections, examine patients in various institutions. During the Senior Year students are assigned to cases of labor in these institutions and at the homes of patients, being allowed to conduct the same under the direction of the assistant who accompanies him.

Gynecology is taught by lectures (didactic and clinical), microscopic and naked eye demonstrations, conference, and "touch" courses. Clinical material is furnished by the Presbyterian Hospital and the Central Free Dispensary. A minimum of three Majors of credit in this department is required for graduation.

Any recent standard text-book may be used for the courses in this department.

COURSES OF INSTRUCTION.

Summer Quarter, 1904 — Spring Quarter, 1905.

OBSTETRICS.

JUNIOR YEAR.

1. A Lecture and Recitation Course.

On Anatomy and Physiology of the female organs of generation, on normal pregnancy, labor and the puerperium.

Tues., Thurs., Sat., 9:00.

Autumn and Spring Quarters. .6Mj.

DR. PIERCE.

2. A Lecture and Recitation Course.

On the pathology of pregnancy, labor and the puerperium.

Tues., Thurs., Sat., 9:00.

Summer and Winter Quarters. .6Mj.

ASST. PROF. PADDOCK.

Prerequisite: *Course 1.*

In the above courses Professor Webster's text-book of Obstetrics is used.

3. Laboratory Course.

In the Normal and Pathological Histology of the female generative organs especially during pregnancy.

Tues., Fri., 10:00-12:00. .4Mj.

Each term throughout the year.

DRS. LYNCH AND JOHNSON.

Prerequisite: *Course 1.*

JUNIOR AND SENIOR YEARS.

4. Practical Obstetrics.

A course given to the class in sections of 12 students, bi-weekly through each Quarter. .4Mj.

Summer Quarter.

Tues., Thurs., 1:00-3:00.

DR. CULBERSON.

Tues., Fri., 10:00-12:00.

DR. GROSVENOR.

Autumn Quarter.

Tues., Thurs., 1:00-3:00.

DR. HOLMES.

Mon., Fri., 1:00-3:00.

DR. LYNCH.

Winter Quarter.

Mon., Thurs., 10:00-12:00.

DR. KEYES.

Mon., Fri., 1:00-3:00.

DR. PIERCE OR DR. JOHNSON.

Wed., Sat., 10:00-12:00.

DR. GROSVENOR.

Tues., Thurs., 1:00-3:00.

DR. CULBERSON.

Spring Quarter.

Mon., Thurs., 10:00-12:00.

DR. KEYES OR DR. GROSVENOR.

Tues., Sat., 1:00-3:00.

DR. LYNCH.

Mon., Fri., 4:00-6:00.

DR. LEWIS.

Mon., Fri., 1:00-3:00.

DR. CULBERSON OR DR. PIERCE.

Tues., Fri., 10:00-12:00.

DR. JOHNSON

Prerequisite: *Courses 1 and 2.*

5A. Clinical Conference Course in Obstetrics.

Limited to twenty-five students. Management of Labor: Asepsis and Antisepsis. Selected Topics in the Pathology of Pregnancy—Affections of the Circulatory System, Kidney Diseases (Eclampsia). Abortion and Miscarriage. Ectopic Pregnancy. Diseases of the Ovum.

Mon., Thurs., 11:00.

.4Mj.

Autumn Quarter.

DR. LEWIS OR DR. PADDOCK.

Spring Quarter.

DR. KEYES OR DR. HOLMES.

Prerequisite: *Courses 1, 2, and 4.*

5B. A Clinical Conference Course in Obstetrics.

Limited to twenty-five students. Selected topics in the Pathology of Labor and the Puerperium: Placenta Previa, Ablatio Placentae, Post Partum Hemorrhage, Adherent and Retained Placenta, Rupture of Uterus, Inversion of Uterus. Puerperal Infection, Asphyxia Neonatorum.

Mon., Thurs., 11:00.

.4Mj.

Winter Quarter.

DR. HOLMES OR DR. KEYES.

Tues., Fri., 9:00.

Summer Quarter.

DR. PADDOCK OR DR. LEWIS.

Prerequisite: *Courses 1, 2, and 4.*

SENIOR YEAR.

6. Clinical Obstetrics.

In the Maternity Department of the Presbyterian Hospital, Charity Hospital, Chicago Lying-in Dispensary, Chicago Maternity, and Central Free Dispensary under the direction of PROFESSOR WEBSTER, ASSISTANT PROFESSOR PADDOCK and others. Throughout the year.

.4M.

7. Obstetrical Practice.

Attendance upon cases of confinement in various hospitals, and at the homes of the patients. Each student will be summoned to cases at the time of delivery, and will attend the patients during and after delivery, under supervision.

Clinical records must be kept by students and certificates obtained.

Throughout the year.

.4M.

GYNECOLOGY.

JUNIOR YEAR.

8. Gynecology.

A lecture course.

Tues., Thurs., Sat., 9:00 A.M.

.6Mj.

Autumn Quarter.

DR. LEWIS.

Spring Quarter.

DR. FINDLEY.

9. Gynecological Diagnosis.

A laboratory course illustrating the histology and pathology of the female generative organs with special reference to clinical diagnosis.

Each Term throughout the year. .4M.

Mon., Thurs., 10:00-12:00.

Tues., Thurs., 3:00-5:00.

DR. FINDLEY.

JUNIORS AND SENIORS.

10. Dispensary Clinics.

Conferences in practical gynecology, limited to small sections.

Daily, 10:00-12:00 throughout the year. .4M.

DRS. FINDLEY, LEWIS, PIERCE.

SENIOR YEAR.

11. College Clinics.

In Gynecology and Obstetrics. Each Quarter. Throughout the year.

Wed., Sat., 10:00-12:00.

Autumn, Winter, and Spring Quarters

PROFESSOR WEBSTER.

Summer Quarter. .4Mj.

DR. FINDLEY.

12. Special Laboratory Work.

For a limited number of students selected by the department staff .5 to 1Mj.

X. DEPARTMENT OF DISEASES OF THE CHEST, THROAT, AND NOSE.

OFFICERS OF INSTRUCTION.

PROFESSOR E. FLETCHER INGALS.

ASSOCIATE PROFESSOR JOHN EDWIN RHODES.

ASSISTANT PROFESSOR CHARLES J. WHALEN.

INSTRUCTORS OTTO T. FREER, J. F. DOLAMORE, GEORGE A. TORRISON.

ASSOCIATES GLENN M. HAMMON, MORLEY D. BATES.

ASSISTANTS N. P. COLWELL, JOSEPHINE JACKSON.

CLINICAL ASSISTANTS JOHN L. JACQUE, C. S. BRANNAN, E. L. KENYON, T. W. LEWIS, JOS. OTRADOVEC
STANTON A. FRIEDBERG, JOHN RITTER.

AT THE WEST SIDE HEBREW DISPENSARY.

GEORGE MORGENTHAU, ASSISTANT CLINICAL PROFESSOR (*extra-mural*).LOUIS E. GORDON, CLINICAL ASSISTANT (*extra-mural*).

INTRODUCTORY.

The work of this department is given to members of the Junior and Senior classes, and includes lecture and recitation courses in the diseases of the chest, throat, and nose; and clinical courses in the Amphitheater and in the Dispensary. A part of the instruction given to small classes in the Cook County and Presbyterian hospitals is devoted to diseases of the chest, so that unusual facilities are afforded for this work. The abundant material available in the Dispensary and hospitals enables the students to observe repeatedly, and examine individually, patients illustrating well-nigh every phase of disease affecting the chest and air-passages, and to see performed the principal laryngological operations. Recitation courses enforce thorough drill in the principles and practice involved. Besides these there are practical courses in physical diagnosis, in laryngology, and in intubation, in which by personal experience the students become familiar with physical signs and with the methods of examination and the use of instruments.

COURSES OF INSTRUCTION.

Summer Quarter, 1904—Spring Quarter, 1905.

JUNIOR YEAR.

1. A Lecture and Recitation Course.

On physical diagnosis and some of the principal diseases of the chest.

Tues., Thurs., Sat., 8:00. .6Mj.

Summer Quarter. DR. COLWELL.

Autumn Quarter.

ASSOCIATE PROFESSOR RHODES,
DRS. HAMMON, BATES, COLWELL.

3. Physical Examination.

A practical course covering twenty-four hours taking up the examination of the normal chest, throat, and nose, and intubation of the larynx. Given to sections of twelve, each Quarter throughout the year.

Summer Quarter. .2Mj.

Tues., Thurs., 9:00. DR. BATES.

Autumn Quarter.

DRS. HAMMON, BATES, COLWELL.

Hours to be announced.

4. Physical Diagnosis.

A practical course in diseases of the chest, throat, and nose, work to cover twenty-four hours. Given to

sections of twelve, each Quarter, throughout the year.

Mon., Wed., Fri., 1:00—2:00. .2Mj.

DR. OTRADOVEC.

Tues., Thurs., Sat., 1:00—2:00.

DR. LEWIS.

Prerequisite: *Courses 1 and 3.*

5. Junior Dispensary Clinics.

In the Central Free Dispensary. Each section will spend one month in this department. Each Quarter throughout the year. .2Mj.

Daily, 1:30—2:30.

DRS. FREER, DOLAMORE, TORRISON.

Assisted by

DRS. HAMMON, JACQUE, BRANNAN, KENYON,
LEWIS, RITTER.

SENIOR YEAR.

6. A Didactic Course.

Continuing Course 1 in diseases of the Chest, together with some of the principal diseases of the Throat and Nose.

Tues., Thurs., and Sat., 8:00. .6Mj.

Winter Quarter. PROFESSOR INGALS AND
ASSOCIATE PROFESSOR RHODES.

7. A Lecture and Recitation Course.

Dealing with special diseases of the throat and nose.

Mon., Wed., Fri., 8:00. .6Mj.

Autumn Quarter, DR. TORRISON.

Spring Quarter, DR. DOLAMORE.

8. The Arena Clinic.

A clinical course in diseases of the Chest, Throat, and Nose. (Each Quarter throughout the year.)

Wed., 2:00-4:00. .3Mj.

Summer Quarter. DRS. FREER AND BATES.

Autumn Quarter. PROFESSOR INGALS.

Winter Quarter. DR. DOLAMORE.

Spring Quarter. ASSOCIATE PROF. RHODES.

9. Senior Dispensary Clinics.

In the small clinic room on the second floor of Senn Hall, given to sections of 36. (Each Quarter throughout the year.) .2Mj.

a, Tues., Thurs., 2:00-3:00.

DR. TORRISON, or DR. BRANNAN.

b, Mon., Fri., 2:00-3:00.

DR. FREER, or DR. HAMMON.

c, Sat., 1:30-3:30.

DR. DOLAMORE, or DR. LEWIS.

10. Advanced Diagnosis Course.

For Seniors in diseases of the Chest, Throat, and Nose. Limited to twelve students per section, each section occupying 24 hours. Each Quarter throughout the year. .2Mj.

Mon., Wed., Fri., 1:00-2:00. DR. KENYON.

Tues., Thurs., Sat., 1:00-2:00. DR. BRANNAN.

11. Advanced Diagnosis.

A course at the Chicago Municipal Lodging House, No. 12 North Union Street. Examinations are made by the students under the direction of the doctor in

charge. Limited to fourteen students. One night each week for each section. Throughout the year.

Daily 7:00-9:30. 2Mj.

DR. WINDELL.

Hours arranged by consultation with Dr. Colwell.

12. Seminar.

A course offered only to Seniors who have completed their Junior work in this department with an *excellent* grade. Each student will pursue a course of reading on the subject assigned, making brief abstracts of the articles read, and from these abstracts write a thesis. Limited to ten students. The credit, according to the quality of work done, will be .2 to 1Mj.

Autumn Quarter.

Subject: "Myocarditis and Angina Pectoris."

Winter Quarter.

Subject: "Pneumonia." DR. COLWELL.

13. An Evening Clinical Course.

In diseases of the Chest at the Cook County Hospital.

Autumn, Winter, and Spring Quarters. .2Mj.

Tues., 7:00-8:00 P. M.

ASST. PROF. WHALEN or DR. FRIEDBERG.

15. A Clinical Course.

(*Extra-mural*) at the West Side Hebrew Dispensary, in the disease of the Throat, Nose, and Ear. Classes limited to eight students.

Each Term throughout the year.

Mon., Thurs., 2:00-4:00. .4M.

ASSISTANT CLINICAL PROFESSOR

MORGENTHAU AND DR. GORDON.

Students taking this course should register at the same time for Course VII-30.

16. Physical Diagnosis.

A clinical course at the Cook County Hospital, occupying twelve hours. Section limited to twelve students. Throughout the year.

Tues., 5:00-6:00.

1Mj

DR. McEWEN.

XI. DEPARTMENT OF OPHTHALMOLOGY AND OTOTOLOGY.

OFFICERS OF INSTRUCTION.

PROFESSOR FERDINAND C. HOTZ.

ASSISTANT PROFESSORS CASSIUS D. WESCOTT, WILLIAM H. WILDER.

ASSOCIATES: L. E. SCHWARZ, GEORGE E. SHAMBAUGH.

ASSISTANTS: E. V. L. BROWN, HENRY R. BOETTCHER, BROWN PUSEY.

CLINICAL ASSISTANTS: DAVID FISKE, JOHN B. ELLIS, LORENZO N. GROSVENOR, F. I. BROWN.

At the West Side Hebrew Dispensary, ASSISTANT PROFESSOR (*extra-mural*) ALBERT B. HALE; CLINICAL ASSISTANT (*extra-mural*) F. L. STRAUSS.

INTRODUCTORY.

The courses in this department are designed to furnish the students that scope of general and practical knowledge of the diseases of the eye and ear which every well-educated physician ought to possess. The general instruction is furnished by recitation courses, with the aid of charts and pathological specimens. The text-books used in these courses are *May* on the Eye, and *Bacon* on the Ear. The practical instruction is furnished by object lessons in the clinic courses, where the students can examine patients, study the progress of diseases and the effect of the treatment from day to day, and witness the delicate technique of the various operations.

A series of courses will be given to train the students by practical exercises in the methods of examination and treatment of the ear.

Another series of courses will deal exhaustively with the normal and morbid anatomy and histology of the eye and ear. These courses will be made particularly instructive by the exhibition of anatomical specimens, microscopic preparations, and lantern slides.

Numerous courses are offered in ophthalmoscopy, in which the student may learn the use of the ophthalmoscope by practical exercises on schematic eyes first and on living eyes afterwards. Every student who wishes to take this course must provide himself with an ophthalmoscope.

As the knowledge gained by recitations is very essential for the understanding of the clinical demonstrations students can not register for clinics, before they have taken the recitation and ophthalmoscopy course.

COURSES OF INSTRUCTION.

Summer Quarter, 1904 — Spring Quarter, 1905.

SENIOR YEAR.

1. A Recitation Course in Diseases of the Eye and Ear.

Mon., Wed., Fri., 8:00-9:00. .6Mj.

Summer Quarter.

DRS. E. V. BROWN AND FISKE.

Autumn Quarter.

ASSISTANT PROFESSOR WESCOTT AND DR.
SHAMBAUGH.

Tues., Thurs., Sat., 9:00.

Winter Quarter.

ASSISTANT PROFESSOR WILDER AND DR. F. I.
BROWN.

Spring Quarter. DRS. PUSEY AND FISKE.

2. A Clinical Lecture Course.—Mon., Wed., Fri., 2:00-4:00 throughout the year. .6Mj.

Summer Quarter.

ASSISTANT PROF. WILDER AND DR. BOETTCHER.

Autumn Quarter. PROFESSOR HOTZ.

Winter Quarter. PROFESSOR HOTZ.

Spring Quarter.

PROFESSOR HOTZ AND DR. SHAMBAUGH.

3. Courses in Ophthalmoscopy at the College Clinic.

Each student must provide himself with an ophthalmoscope. These courses are given to sections of ten students. Each section one term. .2Mj.

Autumn Quarter. Tues., and Fri., 3:00-4:00.

DR. SCHWARZ.

Winter Quarter. Mon., and Thur., 3:00-4:00.

DR. ELLIS.

Spring Quarter. Wed. and Sat., 3:00-4:00.

DR. BOETTCHER.

4. Course on the Anatomy of the Ear.

Class limited to twelve students.

Winter Quarter. Fri., 2:00-4:00. .1Mj.

DR. SHAMBAUGH.

5. Practical Otology.

A course in the examination and treatment of the Ear. Limited to ten students each term. .1Mj.

Autumn Quarter.

Tues., and Fri. 2:00-3:00.

DR. SHAMBAUGH.

Winter Quarter.

Wed. and Sat., 2:00-3:00.

DR. F. I. BROWN.

6. Clinical Courses.

(*Extra-mural*) at the Illinois Charitable Eye and Ear Infirmary. Class limited to ten students for the Quarter.

Thurs. and Sat., 2:00-4:00. .4Mj.

ASSISTANT PROFESSOR WILDER.

Tues., 2:00-4:00. .2Mj.

DR. BOETTCHER.

Wed., 2:00-3:00. .1Mj.

DR. DODD.

A student may take all or either of these courses. But the Trustees of the Infirmary demand an admission ticket for five dollars which is good for one year.

7. Clinical Course.

(*Extra-mural*) in the Diseases of the Eye at the West Side Hebrew Dispensary. Each term throughout the year. Limited to ten students.

Mon., Thurs., 2:00-4:00.

.4M.

ASSISTANT CLINICAL PROFESSOR HALE.
AND DR. STRAUSS.

Students taking this course should register at the same time for Course VIII-19.

8. Course in Ophthalmoscopy.

(*Extra-mural*) and other methods of examination of the Eye, at the West Side Hebrew Dispensary. Limited to ten students each term.

Autumn, Winter, and Spring Quarters.

Wed., Sat., 2:00-4:00.

.4M.

ASSISTANT CLINICAL PROFESSOR HALE.

Students taking this course should register at the same time for Course VII-32; or 35.

XII. DEPARTMENT OF SKIN, GENITO-URINARY, AND VENEREAL DISEASES.

OFFICERS OF INSTRUCTION.

PROFESSOR JAMES NEVINS HYDE.

ASSOCIATE PROFESSOR FRANK HUGH MONTGOMERY.

INSTRUCTOR ALFRED SCHALEK.

ASSOCIATES ERNEST L. McEWEN, OLIVER S. ORMSBY.

ASSISTANTS WILLIAM A. QUINN, WILLIAM L. MCBRIDE.

CLINICAL ASSISTANTS JOSEPH WELFELD, SARA F. JANSEN.

INTRODUCTION.

The work of this department is elective and offered to members of the Senior class. Instruction is given by clinical teaching both in the College amphitheater and in the Dispensary, by recitations, and by demonstrations to small classes, of clinical, bacteriologic, and pathologic phenomena.

Instruction in this department is supplemented by ample use of the large collection of dermatological plates, atlases, and photographs arranged in cases in proximity to the upper amphitheater: also by use of the Baretta models procured in Paris for use of this department. The text-books employed are Hyde and Montgomery's *On the Skin* and Hyde and Montgomery's *Manual of Syphilis and the Venereal Diseases*.

COURSES OF INSTRUCTION.

Summer Quarter, 1904—Spring Quarter, 1905.

SENIOR YEAR.

1. Skin, Genito-Urinary, and Venereal Diseases.

By DRS. SCHALEK, McEWEN AND QUINN. A recitation and conference course given to the class in small sections.

Tues., Thurs., Sat., 8:00.

Each Quarter throughout the year.

One section each Quarter. .6Mj.

2. Clinical Course.

Arena Clinic, by PROFESSOR HYDE or ASSOCIATE PROFESSOR MONTGOMERY. A clinical course on the

subject of the Diseases of the Skin, of the Genito-urinary Organs, and on Venereal Diseases. This clinic has been conducted in the College for more than twenty years, and is attended by a large number of out-patients of both sexes and all ages.

Mon., Fri., 2:00-4:00. Throughout the year.

This course occupies four hours weekly throughout the year. Each Quarter's work constitutes .4Mj.

3. Demonstration Courses.

By ASSOCIATE PROFESSOR MONTGOMERY OR DR. ORMSBY. A practical course of clinical, pathologic,

and bacteriologic demonstrations in skin and venereal diseases, given to the class in sections of not more than ten.

Mon., Fri., 2:00-4:00.

This course occupies four hours weekly during the Autumn and Winter Quarters. Each term's (six weeks) work constitutes a .4M.

4. Genito-Urinary Diseases.

A clinical course in diseases of the genito-urinary tract.

Mon., Fri., 4:00-6:00.

Throughout the year.

Classes limited to forty-eight students.

Each Quarter. .4Mj.

ASSOCIATE PROFESSOR BELFIELD.

5. Lecture Course in Senn Hall.

By DR. McEWEN. A lecture course given to the class in small sections, on the relation of diseases of the skin to disorders of other organs.

Winter Quarter: Each section occupies two hours weekly for six weeks.

6. Histopathology and Bacteriology of the Skin.

A demonstration course including instruction and practical work in methods peculiar to the study of cutaneous pathology and bacteriology.

Tues., Fri., 4:00-6:00. Winter Quarter.

DR. ORMSBY.

Limited to eight students. Each Term constitutes a .4M.

7. Clinical Course in the Central Free Dispensary.

By Drs. ORMSBY AND QUINN. A clinical course given to the class in small sections in the Dermatological and Genito-Urinary Department of the Central Free Dispensary. The student is here brought in personal contact with the patients and required to examine and prescribe for them as he would in private practice.

Daily, 1:00-3:00.

In sections: each section occupies twelve hours weekly for four weeks. .4M.

8. A Course on Syphilis.

with special reference to lesions of internal organs (including the bones, testes, and brain), will be given in the Autumn and Spring Quarters. .4M.

Mon., Fri., 8:00.

DR. ALFRED SCHALEK.

9. Radiotherapy and Phototherapy.

(Optional). A practical course, with demonstration of the technique of the employment of the X-Ray and the Finsen lamp in diseases of the skin. Several lectures of this course will be given each Quarter at hours arranged. The course is open also to practitioners.

Drs. MONTGOMERY AND ORMSBY.

XIII. GENERAL LECTURES AND OPTIONAL COURSES.

1. Medical Jurisprudence.

A lecture course, supplemented by recitations and conferences. Winter Quarter.

Hours to be announced.

PROFESSORIAL LECTURER, JUDGE HENRY V.

FREEMAN AND DR. JAMES C. GILL.

.6M.

2. The History of Medicine.

A lecture course by _____.

Winter Quarter.

Hours to be announced.

Optional course.

3. Examinations for Life Insurance.

A lecture and conference course on the nature and purpose of life insurance; the duties and essential qualifications of the examiner for life insurance, etc.

_____ Quarter.

Hours to be announced.

Optional course.

Lectures on subjects related to the sciences of Physics, Chemistry, and Biology, in their relation to medicine, will be given during the Winter and Spring Quarters. Detailed statement of these courses will be announced later.

FELLOWSHIPS, HOSPITAL INTERNES, AND PRIZES.

FELLOWSHIPS.

The following Fellowships, each yielding an income of four hundred dollars annually, are awarded each year: one in chemistry, two in pathology, one in medicine, and one in surgery.

The fellowships are awarded to graduates in medicine recognized as in every way best qualified for the positions. Each Fellow devotes the year succeeding his appointment to original investigation under the direction of the professor of the department in question in the laboratories of the College. He may be required to devote some time of each day in the College year to the instruction of students, and has opportunity to attend the clinics and pursue other lines of collegiate study.

HOSPITAL INTERNES.

Positions as internes, through a competitive examination held by the respective hospital staffs, are open each spring to graduates of Rush Medical College in the following Chicago hospitals: the Presbyterian, the Cook County, the Michael Reese, the St. Joseph's, the St. Elizabeth's, the St. Luke's, the Augustana, the Chicago, the Alexian Brothers', the Passavant, the Chicago Polyclinic, the German, the Norwegian, the Illinois Charitable Eye and Ear Infirmary, the Baptist, St. Anthony's, the Swedish, the Chicago Maternity, and in a much larger list of institutions outside of the city of Chicago which make appointments from the roll of qualified students of the Senior class in Rush Medical College.

The occupants of these positions receive their board and lodging, and acquire experience in every department of practical medicine and surgery.

PRIZES.

THE BENJAMIN RUSH PRIZE.

A medal of the value of fifty dollars is given by the Faculty at each Commencement to that member of the graduating class who passes the highest examination in every department of medicine represented that year in the examination for the degree.

THE DANIEL BRAINERD PRIZE.

A medal is annually given by the Faculty to the student who makes and presents to the College Museum the best accepted dissection in Surgical Anatomy.

THE FREER PRIZES.

These prizes are derived from the income of a fund presented to the College by the late Nathan M. Freer, of the Board of Trustees, as a memorial of the names of two honored members of his family long identified with the highest interests of this institution.

The J. W. FREER Medal and the sum of seventy-five dollars will be awarded as a first prize to that member of the Junior or Senior classes who presents the best thesis involving original investigation. A second prize of twenty-five dollars will be awarded to the next successful competitor. The thesis must be submitted to the Dean of students on or before the first of April, 1905.

The L. C. P. FREER Medal and the sum of seventy-five dollars will be offered as a first prize to that member of the Freshman or Sophomore classes who presents the best thesis involving original investigation in the fundamental medical branches. A second prize of twenty-five dollars will be awarded to the next most successful of the competitors. *This prize will be competed for by students in the medical courses at the University of Chicago.* The essays are required to be placed in the hands of the Dean of Students by April 1, 1905.

THE EDWARD L. HOLMES PRIZE.

In honor of the late Edward L. Holmes, for many years the professor of Diseases of the Eye and Ear in Rush Medical College, and for several years its president, and who during his long career rendered distinguished services to the institution, the trustees have established the EDWARD L. HOLMES prize for original research, to consist of a table and scholarship for one season, at the Marine Biological Laboratory at Woods Hole, Mass.

This prize is offered in recognition of the great service which is rendered to the medical sciences by research work in biology. The prize will be offered each year to members of the Junior class, and will be awarded for the best piece of work in original research performed in any of the laboratories of Rush Medical College. The recipient of the prize will defray his personal expenses.

The following students have secured internships, by examination and appointment, during the year. The duration of service of these internships varies from one to two years:

Lee, E. C.	Alexian Brothers' Hospital	Sether, A. F.	Norwegian Tabitha Hospital
Shaffrey, C. E.	Alexian Brothers' Hospital, Elizabeth, N. J.	Davis G. G.	Presbyterian Hospital
Blumer, E.	Augustana Hospital	Gephart, C. H.	Presbyterian Hospital
Miller, Elsie P.	Boston Hospital, Boston, Mass.	Hayden, J. G.	Presbyterian Hospital
McClure, F. E.	Cherokee Hospital, Cherokee, Ia.	Heaney, N. S.	Presbyterian Hospital
Vanderhoof, D. A.	Chicago Hospital	Irons, E. E.	Presbyterian Hospital
Fowler, A. H.	Chicago Baptist Hospital	Koch, G. W.	Presbyterian Hospital
McKibben, E. C.	Chicago Baptist Hospital	Post, W. E.	Presbyterian Hospital
Kohn, F. A.	Chicago Lying-in Hospital	Rosenow, E. C.	Presbyterian Hospital
Swift, W. J.	Chicago Policlinic Hospital	Smith, G. B.	Presbyterian Hospital
Hayden, A. A.	Columbus Hospital	Smith, T. B.	Presbyterian Hospital
Rendleman, W. H.	Cook County Hospital	Willard, H. G.	Presbyterian Hospital
Phemister, D. B.	Cook County Hospital	Waugh, J. F.	Presbyterian Hospital
Speed, K.	Cook County Hospital	McDonald, C. H.	Presbyterian Hospital
Foreman, B. H.	Cook County Hospital	Clay, H. E.	Passavant Hospital
Witherstone, W. H.	Cook County Hospital	Henning, O. F.	Passavant Hospital
Morrell, J. R.	Cook County Hospital	Maxwell, H. S.	Passavant Hospital
Davis, H. J.	Cook County Hospital	Barnett, A. F.	Provident Hospital
Matthews, J. B.	Cook County Hospital	Crawford, L. P.	Silver Cross Hospital Joliet, Ill.
Brown, R. C.	Cook County Hospital	Kirtley, H. P.	St. Anthony's Hospital
Reed, E. N.	Cook County Hospital	Banker, E. U.	St. Charles' Hospital, Aurora, Ill.
Bliss, R. W.	Cook County Hospital	Avery H. L.	St. Elizabeth's Hospital
Burlew, J. M.	House Physician County Hospital, San Diego, Cal.	Buckley, E. J.	St. Elizabeth's Hospital
Elliott, Mabel E.	Dunning	Vaughan, R. T.	St. Elizabeth's Hospital
Boose, W. R.	Englewood Union Hospital	Barclay, C. K.	St. Francis' Hospital, Colorado Springs, Colo.
Nixon, S. D.	Englewood Union Hospital	Knauf, G. E.	St. Francis' Hospital, La Crosse, Wis.
Lewis, J. F.	Galesburg Hospital & Sanitarium, Galesburg Ill.	Dondanville, M. S.	St. Joseph's Hospital
Fischer, W. D.	German Hospital	Smith, G. C.	St. Joseph's Hospital
Garriy, J.	Hotel Dieu, El Paso, Tex.	Batman, F. H.	St. Luke's Hospital
Childs, H. A.	Illinois Eye & Ear Infirmary	Clark, C. P.	St. Luke's Hospital
Colver, H. R.	Illinois Steel Co. Hospital, Joliet, Ill.	Hartman, W. M.	St. Luke's Hospital
Kradwell, W. T.	Illinois Steel Co. Hospital, Joliet, Ill.	Allison, R. S.	St. Mark's Hospital Salt Lake City, Utah
Teegarden, A.	Illinois Steel Co. Hospital, South Chicago	Cavanaugh, T. E.	St. Mary's Hospital, Milwaukee, Wis.
Smedal, G.	Lutheran Hospital, La Crosse, Wis.	Madler, N. A.	St. Mary's Hospital, Milwaukee, Wis.
Gauss, J. H. P.	Michael Reese Hospital	O'Connell, Joseph.	St. Mary's Hospital, Milwaukee, Wis.
Shephard, J. H.	Michael Reese Hospital	Harms, A. H.	St. Vincent's Hospital, Portland, Ore.
Lowe, F. M.	Milwaukee Hospital, Milwaukee, Wis.	Matter, L. E.	St. Vincent's Hospital, Portland, Ore.
Nickerson, A. L.	Milwaukee Hospital, Milwaukee, Wis.	Cunningham, O. J.	Tamarack Hospital, Calumet, Mich.
Wescott, O. D.	Muskoka Cottage Sanatorium, Gravenhurst, Ont.	Vail, Ruth.	Woman's Hospital, Chicago.
Rochow, C. J. F.	Norwegian Tabitha Hospital	Shinnick, J. D.	St. Mary's Hospital, West Superior, Wis.

FELLOWSHIPS AND SCHOLARSHIPS AT THE UNIVERSITY OF CHICAGO.

1. *The University Fellowships.*

The University appropriates annually the amount of twenty thousand dollars (\$20,000) for Fellowships in the Graduate Schools. These Fellowships are awarded by the Trustees upon the recommendation of the President and the nomination of particular departments. Each year about seventy fellowships are assigned, ranging in individual value from \$120, or the tuition fees of a student for three Quarters, to \$520.

2. *Applications for Fellowships.*

Applications for fellowships should be addressed to the President of the University, *and should be in his hands on or before March 1.*

3. *Appointments to Fellowships.*

- 1) *Date.* The annual assignment of Fellowships is made about the first of April. A Fellowship is available for any three of the four Quarters beginning with the Summer Quarter following the date of appointment.
- 2) *Attainments required.* The candidate must have attained proficiency in some department. In general he should have spent at least one year in resident study after receiving his Bachelor's degree. In making the appointment special weight is given to theses indicating the candidate's ability to conduct original investigation.

4. *Special Fellowships.*

In addition to the regular University Fellowships mentioned above, there are special Fellowships offered by individuals. These vary somewhat in number and amount from year to year. At present they are as follows:

- 1) The *William A. and Fanny C. Talcott Fellowships and Scholarships*. In 1896 William A. Talcott, of Rockford, Ill., endowed four Fellowships and Scholarships, two of which bear his name and two the name of his wife, Fanny C. Talcott. They are intended primarily for the benefit of graduates of the Rockford College, but in the absence of such beneficiaries may be assigned to others. They pay the tuition fees of those appointed to them.
- 2) The *Bucknell Fellowship*, yielding \$400, offered by Mr. Charles Miller, Franklin, Pa., is open to graduates of Bucknell University. The appointment to this fellowship is made by the faculty of Bucknell University.
- 3) The *Joseph B. Lowenthal Fellowship in Chemistry* endowed by Mr. Berthold Lowenthal of Chicago as a memorial of his son Joseph B. Lowenthal. It yields about \$420 to the incumbent annually appointed, and is awarded on the nomination of the Department of Chemistry and the recommendation of the President of the University.

5. *Graduate Scholarships.*

The Scholarships available for students in the Graduate Schools are as follows:

- 1) *Scholarships for Excellence in the Work of the Senior Colleges*. The University offers twenty Scholarships for excellence in the work of the Senior Colleges. The scholarships are assigned annually in the Spring Quarter, on the nomination of the Board of the Senior Colleges. Each department of the University, with the approval of the Committee on Scholarships, has the privilege of naming a student who is for that year the honor student of the Senior Colleges in that department, and to this student there is given a Graduate

Scholarship yielding in each case a sum equal to the University tuition fees for three Quarters (\$120) provided the student continues his studies in the Graduate Schools.

- 2) The *William A. and Fanny C. Talcott Fellowships and Scholarships*. See under Fellowships.
- 3) *Affiliation Scholarships*. Under the conditions of affiliation with Kalamazoo College, Des Moines College, Butler College, John B. Stetson University, and Illinois College, the three students who stand highest in scholarship and general excellence in each graduating class are awarded scholarships covering the University tuition fees for three Quarters (\$120). Under this arrangement the University offers:

Three Scholarships to graduates of Kalamazoo College.

Three Scholarships to graduates of Des Moines College.

Three Scholarships to graduates of Butler College.

Three Scholarships to graduates of John B. Stetson University.

Three Scholarships to graduates of Illinois College.

- 4) *Scholarships for Teachers in Affiliated Schools*. Under the conditions of affiliation teachers in the various Affiliated Schools of the University are assigned Scholarships covering the tuition fee. The conditions under which these Scholarships may be obtained will be mailed on application.
- 5) *Scholarships for Public Speaking*. Three Scholarships, each yielding the amount of forty dollars (\$40) or the tuition fee for a Quarter, are awarded the winners in the preliminary contests in public speaking. In case the winner in a preliminary contest has previously secured a scholarship in this way in the Graduate Schools the award is made to the second in rank.
- 6) *Scholarships for Officers*. Forty Scholarships, each yielding the tuition fees for three Quarters (\$120), are assigned annually to members of the faculties, or wives of members, who may desire to take courses of instruction in the University.

MEDICAL SOCIETIES.

The fact that a very large number of medical men practice in Chicago has led to the establishment of a number of medical societies, general and special. Among the more interesting to medical students in the early years of their course is the Chicago Pathological Society. A large number of clinical societies, notably the Chicago Medical Society and its various branches, will interest the student particularly in the later years of his course.

The University of Chicago Medical Club meets on the first and third Monday evenings of each month in the lecture room in the Physiological Laboratory at 8:15 sharp. At the meetings of this society the advanced work and original research of the various laboratories will be reported, and topics of general medical and scientific interest will from time to time be discussed. The meetings will be open to medical students. The society holds no meetings during the Summer Quarter.

ALUMNI ASSOCIATION.

The Alumni Association of Rush Medical College holds yearly meetings. These meetings, which precede the regular commencement of the College, will occur on June 12, 13, and 14, 1905. All graduates of the College in good standing are eligible to membership, which can be obtained by the payment of one dollar, the annual dues. The officers for the year ending July 1, 1905, are as follows:

President, Dr. D. H. Bowan, '76.....	Waukon, Iowa.
First Vice-President, Dr. L. G. Bass, '80.....	Chicago, Ill.
Second Vice-President, Dr. Henry Blank, '85.....	Jackson, Wis.
Third Vice-President, Dr. T. J. Creel, '93.....	Angola, Ind.
Necrologist, Dr. A. L. Craig, '78.....	Chicago, Ill.
Secretary and Treasurer, Dr. B. M. Linnell, '93.....	Chicago, Ill.

The dues should be sent to the Secretary of the Association, Dr. B. M. Linnell, 100 State Street, Chicago.

The Association, beginning with this year, will publish a small bulletin four times a year. This for the present will be sent to members without extra charge. The Association also supports a Fellow doing research work in residence at the college. Dr. E. C. Rosenow, 1902, has had this position for two years. Contributions to this fund are solicited.

Alumni are requested to inform the College Historian, Dr. John Edwin Rhodes, 100 State Street, Chicago, of any change of address. They will also confer a favor by sending him a copy of any address, program, or other document, relating to the early history of the college.

MATRICULATES FOR THE SESSION OF 1904-5. 3-4

The following list includes only those students who were in attendance during one or more Quarters, and who were entitled to take the Quarterly Examinations.

ABBREVIATIONS.—*u.*=University; *c.*=College; *s.*=School; *hs.*=High School; *a.*=Academy; *sm.*=Seminary; *inst.*=Institute (or institution).

PERIOD OF RESIDENCE.—*s*=Resident during Summer Quarter, 1902.—*a*=Resident during Autumn Quarter, 1902.—*w*=Resident during Winter Quarter, 1903.—*sp*=Resident during Spring Quarter, 1903.

FRESHMAN AND SOPHOMORE CLASSES.

NAME	SCHOOL OR INSTRUCTOR	HOME ADDRESS
Adams, Orville Louis, <i>a w</i>	A.B. (<i>Washington Agricultural c.</i>)	Colfax, Wash.
Adams, Roy Bennet, <i>a sp</i>	A.B. (<i>u. of Nebraska</i>)	Lincoln, Neb.
Allen, Jessie Blount, <i>s a w</i>	A.B. (<i>u. of Washington</i>) '99; A.M. (<i>Ibid.</i>) '01	Seattle, Wash.
Allen, Frederick Mason, <i>w</i>	A.B. (<i>u. of California</i>) '02	Pomona, Calif.
Allin, Frank Wesley, <i>s</i>	S.B. (<i>Baker u.</i>)	Emporia, Kan.
Allison, Charles Newton, <i>s</i>	<i>Good Hope hs.</i>	Chicago
Anderson, Robert Adolph, <i>sp</i>	S.B. (<i>u. of South Dakota</i>) '00	Dell Rapids, S. Dak.
Annis, Homer Burnham, <i>a w sp</i>	B.A. (<i>Cornell c.</i>) '03	Osage, Ia.
Arthur, Silvester Irwin, <i>s</i>	<i>u. of Missouri</i>	Columbus, Mo.
Audrian, Leslie Carl, <i>a w sp</i>	S.B. (<i>u. of Texas</i>) '02	Roswell, New Mexico.
Ayres, Lloyd Clark, <i>a w sp</i>	<i>Ohio State u.</i>	Chicago
Bartlett, John Donnington, <i>a w</i>	A.B. (<i>Lombard c.</i>)	Galesburg,
Batty, Arthur Joseph, <i>a w sp</i>	A.B. (<i>Ripon c.</i>) '03	Glen, Wis.
Baxter, Leroy Worth, <i>a w sp</i>	A.B. (<i>u. of Kansas</i>) '03	Columbus, Kan.
Beall, Arthur Galloway, <i>w</i>	<i>Junior c. (u. of Chicago)</i>	Shannon City, Ia.
Beaton, Lindsay Alexander, <i>s</i>	S.B. (<i>Beloit c.</i>) '02	Chicago
Beatty, Alexander Pearson, <i>a</i>	B.S. (<i>Fiske u.</i>)	Selma, Ala.
Beer, James Anderson, <i>s</i>	<i>Ohio State u.</i>	Columbus, O.
Beery, Harry Reber, <i>a w</i>	<i>Ohio State u.</i>	Canal Winchester, O.
Beifeld, Arthur Frederick, <i>a w sp</i>	Ph.B. (<i>u. of Chicago</i>) '02	Chicago
Bell, Elexious Thompson, <i>s</i>	<i>u. of Missouri</i>	Hatch, Mo.
Bell, Lester Bomar, <i>s a w sp</i>	<i>Osceola hs.</i>	Osceola, Wis.
Benner, Charles Russell, <i>s</i>	<i>Indiana u.</i>	Burrows, Ind.
Best, Charles Lorton, <i>s a</i>	A.B. (<i>u. of Michigan</i>)	Freeport
Blakey, Halbert Brush, <i>s a w sp</i>	<i>South Side a.</i>	Union Grovel Wis.
Blickenstaff, August Jacob, <i>a</i>	<i>u. of Indiana</i>	Idaville, Ind.
Bliss, Guy Luvergne, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Somonauk, Ill.
Blodgett, Harry Hoagland, <i>a w sp</i>	<i>Simpson c.</i>	Indianola, Ia.
Blomer, Joseph Henry, <i>s a w sp</i>	A.B. (<i>St. Francis c.</i>); A.M. (<i>Ibid.</i>)	Quincy,
Bodman, Edward Whitney, <i>a w sp</i>	A.B. (<i>Williams c.</i>) '03	Chicago
Boettliher, Henry Rudolph, <i>s</i>	<i>Hahnemann c.</i>	Chicago
Boggs, Nathan, <i>a w sp</i>	<i>Richland Center hs.</i>	Richland Center, Wis.
Bonniwell, Harry Melvin, <i>s</i>	<i>Union c.</i>	
Boughton, Thomas Harris, <i>s a w sp</i>	<i>Lewis inst.</i>	Chicago
Bowman, Aaron Luther, <i>s a w</i>	<i>u. of Illinois</i>	Rochester, Ind.
Boyden, Frank Edson, <i>s</i>	S.B. (<i>Agricultural c., South Dakota</i>)	Chicago
Boynton, Vincent Russell, <i>a w sp</i>	<i>Waukegan hs.</i>	Waukegan,
Bradley, William W., <i>sp</i>	<i>u. of Michigan</i>	Decatur, Mich.
Braunworth, Jessie A., <i>s</i>	<i>Iowa State u.</i>	Muscatine, Ia.
Breyfogle, Herbert Arthur, <i>a w</i>	A.B. (<i>Ohio Wesleyan u.</i>)	Delaware, O.
Brown, Arthur Frederick, <i>s a</i>	<i>Lake View hs.</i>	Chicago
Brown, Wade Hampton, <i>s</i>	<i>u. of Nashville</i>	Marshall, Tex.
Brown, Benjamin Henton, <i>w sp</i>	B.A. (<i>Washington & Lee u.</i>)	Waverly, Mo.

NAME

SCHOOL OR INSTRUCTOR

HOME ADDRESS

Brown, Orville Harry, <i>s a w</i>	A.B. (<i>Kansas State u.</i>) '01	Sabetha, Kan.
Brubaker, Ora George, <i>s a w</i>	<i>Rush medical c.</i>	Russiaville, Ind.
Burns, Leslie Rush, <i>a w sp</i>	S.B. (<i>u. of Wisconsin</i>) '08	Oakfield, Wis.
Buxton, Clarence Charles, <i>a</i>	<i>Shurtleff c.</i>	Oklahoma City, Okla.
Caldwell, Joseph Stewart, <i>s</i>	<i>Marysville c.</i>	Jefferson City, Mo.
Calhoun, Frank Warren, <i>a w sp</i>	<i>Amity c.</i>	Mt. Ayr, Ia.
Campbell, Mary <i>w</i>	<i>Unclassified s. (u. of Chicago)</i>	Chicago
Campbell, James T., M.D., <i>s</i>	<i>u. of Toronto</i>	Chicago
Cheney, Henry William, M.D., <i>s</i>	<i>Northwestern u.</i>	Chicago
Childs, Wilfred Leonard, <i>s</i>	<i>Springfield, Mo. hs.</i>	Chatham, Mass.
Christian, Edward F., <i>s a w sp</i>	<i>Merrill hs.</i>	Merrill, Wis.
Churchill, James Forrest, <i>a w sp</i>	<i>Knox c.</i>	Roseville
Coburn, Robert Leroy, <i>s a w sp</i>	<i>Carroll hs.</i>	Carroll, Ia.
Cole, J. Clermont, <i>s</i>	<i>N. I. Normal</i>	Phoenix, Ariz.
Conlin, Frank M., <i>a w sp</i>	<i>u. of Wisconsin</i>	Madison, Wis.
Cornell, Edward Lyman, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Chicago
Cornwall, Delos Edward, <i>a w sp</i>	S.B. (<i>u. of Idaho</i>)	Moscow, Idaho
Cramer, Jacob T., <i>s</i>	<i>u. of Michigan</i>	Muskegon, Mich.
Corkery, John Ripley, <i>s</i>	<i>Toledo hs.</i>	Toledo, O.
Cruikshank, Roswell Dwight, <i>s</i>	Ph.B. (<i>Iowa c.</i>) '01	Humboldt, Ia.
Curtis, Arthur Hale, <i>s</i>	S.B. (<i>u. of Wisconsin</i>)	Madison, Wis.
Curtiss, F. Homer, <i>s</i>	B.S. (<i>Purdue u.</i>) '00	Austin, Tex.
Dalton, Ernest Charles, <i>s</i>	<i>Ealing c.</i>	St. Helena, Ore.
Darling, Ernest Charles, <i>s</i>	<i>u. of Oregon</i>	St. Helena, Ore.
Day, Dudley Watson, <i>s a w sp</i>	<i>Iowa State c.</i>	Ames, Ia.
Dencker, Christian, <i>s a w sp</i>	<i>u. of Leipzig</i>	Buffalo, N. Y.
Dick, George Frederick, <i>s</i>	<i>Indiana u.</i>	Ft. Wayne, Ind.
Dirks, Martin Herman, <i>a w</i>	S.B. (<i>Midland c.</i>) '01	South Auburn, Neb.
Doran, Sadie Celia, <i>a w sp</i>	<i>Unclassified s. (u. of Chicago)</i>	Davenport, Ia.
Dore, Claude Bernard, <i>s</i>	<i>Mattoon hs.</i>	Louisville, Ky.
Dudley, Frank Church, <i>s</i>	B.A. (<i>Amherst c.</i>) '00	Marlboro, Mass.
Eaton, Dora, <i>s</i>	<i>Lewis inst.</i>	Oak Park
Earle, James Richard, <i>a w sp</i>	B.A. (<i>Cornell u.</i>) '02	Lakemont, N. Y.
Eignus, Chester Arthur, <i>a w sp</i>	<i>Junior c. (u. of Chicago)</i>	Forrest
Epley, Otis Hoyt, <i>s</i>	<i>Rush medical c.</i>	New Richmond, Wis.
Ervin, Wilbur Berry, <i>s</i>	<i>West Division hs.</i>	Chicago
Evans, Evan Stark, <i>s a w sp</i>	Ph.B., (<i>Iowa c.</i>) '02.	Hampton, Ia
Ewing, Fred E., <i>w sp</i>	B.S. (<i>Knox c.</i>) '03	Arcola
Feagler, Jesse Peter, <i>a w sp</i>	<i>Waterloo hs.</i>	Waterloo, Ind.
Fehliman, W. Edward, <i>s a w sp</i>	<i>Fremont hs.</i>	Beemer, Neb.
Fidler, Charles, <i>s a w sp</i>	<i>Rensselaer hs.</i>	Rensselaer, Wis.
Fischmann, Egon Walter, <i>s a w sp</i>	<i>Robert A. Waller hs.</i>	Chicago
Fitzhenry, Newman Lee, <i>a w sp</i>	<i>Lewiston hs.</i>	Lewiston
Flanders, Henry Isham, <i>w sp</i>	<i>Rush medical c.</i>	Sturgis, Mich.
Fowler, Alfred Hugh, <i>s</i>	A.B. (<i>u. of Chicago</i>) '01	Chicago
Francis, Horace Montague, <i>s a w sp</i>	<i>Austin hs.</i>	Chicago
Frank, Louis Harry, <i>a</i>	<i>Senior c. (u. of Chicago)</i>	Chicago
Frederickson, Frederick Olaf, <i>sp</i>	<i>Lewis inst.</i>	Chicago
Gardner, Miriam, <i>a w sp</i>	<i>Chase s. for Girls</i>	Pasadena, Calif.
Gillette, Philip Frederick, <i>s w</i>	A.B. (<i>Illinois c.</i>) '02; M.D. (<i>Northwestern u.</i>) '06	Elgin
Goettsch, Emil, <i>a w sp</i>	S.B. (<i>u. of Chicago</i>) '03	Davenport, Ia.

NAME

SCHOOL OR INSTRUCTOR

HOME ADDRESS

Goodrich, George Erastus, *s a w sp*
 Gorgas, Laurence De Laney, *s*
 Gotham, Charles Lewis, *s a w sp*
 Gowan, Charles Homer, *a w sp*
 Graham, E. Ambrose, *s*
 Gray, Walter Kempston, *sp*
 Greene, John Winston, *a*
 Griffin, Ina May, *a w sp*
 Gurney, Belle Bishop, M.D., *s*
 Hale, David Jones, *s*
 Hall, David Connolly, *s*
 Halsey, Henry Allen, *a w sp*
 Hamburger, Walter Wile, *s a w sp*
 Hamilton, Robert Emmet, *s*
 Hanley, Erastus Talbot, *s*
 Harger, John Ross, *a w sp*
 Harley, Elmer, *s a w sp*
 Hartigan, Eugene Laurence, *sp*
 Harwood, Charles B., *a w sp*
 Hatton, Edward Howard, *s*
 Heinen, John Henry, *s*
 Heise, Carl Augustus, *s sp*
 Hill, Isaac Everett, *s*
 Hill, James Charlesworth, *s*
 Holmsen, Holm, *s a w sp*
 Holt, Joseph H., *s*
 Hoon, Arthur Samuel, *s a*
 Horovitz, David Alfred, *w sp*
 Horovitz, Janco Samuel, *a w sp*
 Horton, Jessie, *s*
 Howard, William James, *a w*
 Hoy, Clinton Lyman, *a w sp*
 Hoyne, Archibald Lawrence, *s*
 Humphrey, Ira Karr, *a w sp*
 Hunt, Morton Leon, *s a w sp*
 Ingbert, Charles, *s*
 Johnston, William Walter, *s*
 Johnston, Allan Perry, *a w sp*
 Jones, Thomas Almon, *a w*
 Jones, Robert Young, *a w sp*
 Joseph, Don Rosco, *a w sp*
 Kacin, Waldburge Aloysia, *a*
 Kahn, Harry, *s*
 Kane, Joseph Patrick, *s*
 Karasek, Matthew, *s*
 Katherman, Charles Augustus, *s a w sp*
 Kauffman, Jesse Robinson, *a w sp*
 Kendall, Guy Mumford, *sp*
 Kinne, John Baxter, *a w sp*
 Kinney, Lyle Cary, *sp*
 Kirk, Edwin Garvey, *a w sp*

Lake Forrest hs.
u. of Maryland
Oshkosh State Normal
S.B. (Pomona c.) '02
Princeton u.
A.B. (Leland Stanford Jr. u.) '01
Albion hs.
Senior c. (u. of Chicago)
Herring c.
B.S. (Michigan Agricultural c.) '08
Brown u.
Leland Stanford Jr. c.
S.B. (u. of Chicago)
Kirksville Normal s.
S.B. (Franklin c.)
Senior c. (u. of Chicago)
Lewis inst.
Ph.B. (u. of Chicago) '04
A.B. (Oberlin c.) '02
u. of Wisconsin
S.B. (u. of Chicago) '03
Winona hs.
u. of Colorado
A.B. (Monmouth c.) '02
Drummons Gymnasium (Norway)
Fuland medical c.
u. of Illinois
Junior c. (u. of Chicago)
Rush medical c.
Rush medical c.
Junior c. (u. of Chicago)
Ph.B. (u. of Chicago) '00
A.B. (Williams c.) '01
Lincoln a.
Purdue u.
A.B. (u. of North Dakota) '05; Ph.D. (u. of Chicago) '02
Whitman c.
Senior c. (u. of Chicago)
A.B. (Kentucky State c.) '00; u. of Louisville
Senior c. (u. of Chicago)
Bradley Polytechnic inst.
Armour inst.
Northwestern u.
u. of Minnesota
Leland Stanford Jr. u.
A.B. (Kansas State c.) '07; A.M. (Ibid) '08
Junior c. (u. of Chicago)
Rush medical c.
S.B. (Fargo c.) '03
u. of California
S.B. (u. of Chicago) '02

Chicago
 Chicago
 Milwaukee, Wis.
 Los Angeles, Calif.
 Chicago
 Milwaukee, Wis.
 Albion, Ind.
 Charleston
 Chicago
 Benton Harbor, Mich.
 Boston, Mass.
 Phoenix, Ariz.
 Chicago
 Kirksville, Mo.
 Prairie Creek, Ind.
 Beatrice, Neb.
 Hot Springs, Ark.
 Chicago
 Wattsburg, Pa.
 Peru, Wis.
 Ambia, Ind.
 Alma, Wis.
 Grand Junction, Colo.
 Newton, Ia.
 Chicago
 Sherman, Tex.
 Dixon
 Chicago
 San Francisco, Calif.
 Chicago
 Washington, D. C.
 Woodstock
 Chicago
 Cordova
 Winchester, Ind.
 Chicago
 Walla Walla Wash.
 Waupun, Wis.
 Montpelier, Ky.
 Lyons, Kan.
 Chatsworth
 Chicago
 Chicago
 Minneapolis, Minn.
 Tacoma, Wash.
 Lawrence, Kan.
 Chicago
 Wichita, Kan.
 Fargo, N. D.
 Los Angeles, Calif.
 Lima, O.

NAME

SCHOOL OR INSTRUCTOR

HOME ADDRESS

Kitzing, Frederick Ferd., <i>s w</i>	<i>Rush medical c.</i>	Halle a.S., Saxony.
Koltinsky, Irvin Sunthimer, <i>a w sp</i>	<i>Lewis inst.</i>	Owensboro, Ky.
Larkins, Ida Marie, <i>a</i>	<i>Junior c. (u. of Chicago)</i>	Traverse City, Mich.
Leathers, Waller Smith, <i>s</i>	<i>u. of Virginia</i>	Columbia, S. C.
*Leaton, Fred Williams, <i>a</i>	<i>u. of Michigan</i>	Terry, S. D.
Leseman, Fredrick Joseph, <i>sp</i>	<i>Junior c. (u. of Chicago)</i>	Nashville
Lincoln, Mary Cain, <i>s</i>	<i>Ph.B. (u. of Chicago) '01</i>	Chicago
Lindorf, Oscar William, <i>s</i>	<i>Rush medical c.</i>	New Windsor
Linthicum, Porter Hodge, <i>s a sp</i>	<i>A.B. (Yale u.) '01</i>	Evansville, Ind.
Lockwood, Chester Herbert, <i>a w sp</i>	<i>Junior c. (u. of Chicago)</i>	Wichita, Kan.
Logan, George Morrison, <i>a w sp</i>	<i>Junior c. (u. of Chicago)</i>	Manhattan, Kan.
Long, Charles Edward, <i>a w sp</i>	<i>u. of Michigan</i>	Ithaca, Mich.
Longley, Jonas Rhodes, <i>a w sp</i>	<i>S.B. (u. of Nebraska) '02</i>	North Platte, Neb.
Ludden, Homer Dexter, <i>s</i>	<i>Boscobel hs.</i>	Boscobel, Wis.
Lundgren, Albert Theodore, <i>a w sp</i>	<i>B.S. (Knox c.) '01</i>	Galesburg
Mackenzie, Wellie S., <i>sp</i>	<i>u. of Michigan</i>	Adrian, Mich.
Manwaring, Wilfred Hamilton, <i>s</i>	<i>u. of Michigan</i>	Winona, Mich.
Matthews, Samuel Alexander, M.D., <i>w</i>	<i>u. of Michigan</i>	Chicago
Melaas, Wilbur Guy, <i>s</i>	<i>Stoughton, Wis., hs.</i>	Stoughton, Wis.
Maver, Maria Blair, <i>w sp</i>	<i>McGill Normal s., Canada</i>	Chicago
Mendel, Max Louis, <i>a sp</i>	<i>Senior c. (u. of Chicago)</i>	Chicago
Metcalf, Frank Woodward, <i>s a w sp</i>	<i>Dodgeville hs.</i>	Dodgeville, Wis.
Metzger, Violetta Eugenia, <i>s</i>	<i>Woman's medical c.</i>	Kansas City, Mo.
Meyer, J. H. Warren, <i>a</i>	<i>La Porte hs.</i>	La Porte, Ind.
Miller, Ernest Wilson, <i>s a w sp</i>	<i>Englewood hs.</i>	Chicago
Miller, George Enos, <i>s a w</i>	<i>Kenyon Military a.</i>	Chicago
Milleron, Royal Hearn, <i>a w sp</i>	<i>Salt Lake City hs.</i>	Salt Lake City.
Mock, Harry Edgar, <i>s a w sp</i>	<i>Franklin c.</i>	Muncie, Ind.
Moloney, Fred Graham, <i>sp</i>	<i>u. of Chicago</i>	Ottawa,
Moore, William Henry Hudson, <i>a w sp</i>	<i>B.S. (Purdue u.) '03</i>	Lafayette, Ind.
Murnan, Harry Allen, <i>a w sp</i>	<i>Rush medical c.</i>	Lewis, Ia.
Murphy, Elam Turner, <i>sp</i>	<i>A.B. (Wabash c.) '99; A.M. (u. of Indianapolis) '02</i>	Crawfordsville, Ind.
Museus, H. Benjamin, <i>a w sp</i>	<i>Ph.G. (Northwestern s. of Pharmacy)</i>	Chetek, Wis.
McCarty, Paul Dean, <i>s a w sp</i>	<i>La Porte hs.</i>	La Porte, Ind.
McClure, John Howard, <i>s w</i>	<i>u. of Minnesota</i>	St. Paul, Minn.
McCord, Frances, <i>s</i>	<i>Northwestern Woman's medical c.</i>	Chicago
McCumber, Clarence Nicholas, <i>s</i>	<i>Lewistown hs.</i>	Lewistown
McGibbon, Walter P., <i>s</i>	<i>Hahnemann c.</i>	Chicago
McGuigan, Hugh, <i>a w sp</i>	<i>S.B. (N. Dakota Agricultural c.) '98</i>	Fargo, N. Dak.
McKenna, Charles Morgan, <i>s</i>	<i>State Normal s.</i>	Platteville, Wis.
McKesson, Elmer Isaac, <i>s a w sp</i>	<i>Indiana u.</i>	Walkertown, Ind.
McKinley, Alexander Daniel, <i>s a w sp</i>	<i>S.B. (Iowa State c.) '00</i>	Cermont, Ia.
McMartin, Charles, <i>a w sp</i>	<i>Ph.B. (Iowa c.) '02</i>	Des Moines, Ia.
Neilson, Charles Hugh, <i>a w</i>	<i>A.B. (Ohio Wesleyan u.) '04; A.M. (Ibid.) '07; Ph.D. (u. of Chicago) '02</i>	Chicago
Nebours, Robert Kirkland, <i>s</i>	<i>Louisiana State Normal</i>	Reeknor La.
Nance, Willis Orville, <i>s</i>	<i>u. of Michigan</i>	Chicago
Nevius John Wilson, <i>a w</i>	<i>S.B. (u. of Wisconsin) '02</i>	Los Angeles, Calif.
Newberger, Charles, <i>s a w sp</i>	<i>Joseph Medill hs.</i>	Chicago
Norris, Allen Anson, <i>s sp</i>	<i>A.B. (Indiana u.) '02</i>	Syracuse, N. Y.

* Deceased.

NAME	SCHOOL OR INSTRUCTOR	HOME ADDRESS
Odell, Lester Ely, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Chicago
Oldham, Gordon Carr, <i>a w</i>	A.B. (<i>Friends u.</i>) '02	Wichita, Kan.
Olney, David Kahn, <i>a</i>	<i>Ohio Wesleyan c.</i>	Van Wert O.
Omelveña, James Gibson, <i>a w</i>	<i>Hanover c.</i>	Delphi, Ind.
Oyen, Albert Nelson, <i>s</i>	A.B. (<i>u. of Illinois</i>) '02	Chicago
Palmer, Earl, <i>s a w sp</i>	<i>Logansport hs.</i>	Logansport, Ind.
Paulson, Nels Peter, <i>a w sp</i>	<i>State Agricultural c. Utah</i>	Logan City, Utah
Pearson, Edwin Arthur, <i>s</i>	A.B. (<i>Beloit c.</i>) '01	Beloit, Wis.
Perlstein, Samuel, <i>s a w sp</i>	<i>Joseph Medill hs.</i>	Chicago
Peterson, Charles W., <i>sp</i>	<i>Park c.</i>	Parkville, Mo.
Pettet, Ormsby Elroy, <i>s a w</i>	A.B. (<i>u. of Chicago</i>) '00	Chicago
Pike, Frank Henry, <i>a w sp</i>	A.B. (<i>Indiana u.</i>) '03	Plainfield
Pitcher, Jonathan Jay, <i>a w</i>	<i>St. John's Military a.</i>	Mt. Pleasant, Ia.
Potter, Hollis Elmer, <i>a w sp</i>	<i>Senior c (u. of Chicago)</i>	Waupun, Wis.
Prichard, James Eugene, <i>w sp</i>	<i>Junior c. (u. of Chicago)</i>	Aurora
Putnam, Glenn Worthy, <i>a w sp</i>	<i>West Aurora hs.</i>	Chicago
Quinn, Edmund Lennon, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Chicago
Ramsey, Paul Temple, <i>sp</i>	<i>Junior c. (u. of Chicago)</i>	Reedsburg, Wis.
Ransom, Stephen Walter, <i>s</i>	S.B. (<i>u. of Chicago</i>) '02	Dodge Center, Minn.
Redmond, Andrew Jackson, <i>s</i>	<i>Indiana u.</i>	Peru, Ind.
Redmond, Thomas, <i>a w sp</i>	<i>Indiana u.</i>	Deerfield, Ind.
Rehling, Charles Frederick, <i>s a w</i>	<i>Purdue u.</i>	Ft. Wayne, Ind.
Reque, Herman Andrew, <i>a w</i>	A.B. (<i>Luther c.</i>) '94	Chicago
Reynolds, Harry Rogers, <i>s</i>	<i>Rush medical c.</i>	Clinton, Ia.
Richards, Gill, <i>a w sp</i>	<i>u. of Utah</i>	Salt Lake City, Utah
Richardson, John Mead Stanley, <i>a</i>	<i>Jamaica State Normal, '03</i>	Chicago
Rikli, Arthur Richard, <i>a w sp</i>	S.B. (<i>Northwestern c.</i>), Ind., '03	Murdock, Neb.
Rogers, Nathaniel Curtis, <i>a w sp</i>	<i>Junior c. (u. of Chicago)</i>	Newell, Ia.
Rohde, Ali'e, <i>s</i>	<i>u. of Chicago</i>	Chicago
Rollefson, Carl J., <i>a w sp</i>	A.B. (<i>St. Olaf c., Northfield, Minn.</i>)	Grand Forks, N. D.
Rook, Pearl Blanche, <i>s</i>	<i>Franklin c.</i>	Dunkirk, Ind.
Rucker, Augusta, <i>s</i>	<i>u. of Texas</i>	Paris, Tex.
Rundle, Walter Gustavus, <i>a w sp</i>	S.B. (<i>Tarkio c.</i>) '00	Apache, Okla.
Runyan, Herman Call, <i>a w sp</i>	A.B. (<i>u. of Indiana</i>) '03	Alexander, Ind.
Russell, Claude Venard, <i>a w sp</i>	<i>u. of Wisconsin</i>	Portage, Wis.
Ryan, Lee Mathew, <i>w sp</i>	<i>Junior c. (u. of Chicago)</i>	Leavenworth, Kan.
Sawyer, Carl Walker, <i>s sp</i>	<i>Senior c. (u. of Chicago)</i>	Marión, O.
Schall, James Garvius, <i>s</i>	<i>Hahnemann c.</i>	Chicago
Schirding, William Philip, <i>s</i>	<i>Rush medical c.</i>	Palatine
Schomerus, Rudolph Edward, <i>a w</i>	<i>Rose Polytechnic inst.</i>	Terre Haute, Ind.
Schrager, V. Lupu, <i>w</i>	A.B. (<i>Bucharest u.</i>); B.S. (<i>Ibid.</i>)	Chicago
Scott, Garland Dix, <i>a</i>	<i>Sullivan hs.</i>	Sullivan, Ind.
Scott, Lee Osborn, <i>s</i>	A.B. (<i>u. of Wooster</i>) '01	New Albany, Ind.
Scudder, Roy, <i>sp</i>	A.B. (<i>Friends u.</i>) '03	Wichita, Kans.
Sether, Alvin Fernando, <i>s</i>	<i>Rush medical c.</i>	Waupaca, Wis.
Shaff, DeWitt Clinton, <i>w sp</i>	<i>Swarthmore, Pa., c.</i>	Clinton, Ind.
Shankin, Robert Clarence, <i>s</i>	S.B. (<i>Hanover c.</i>) '02	Frankfort, Ind.
Showers, William Edward, <i>s</i>	A.B. (<i>Indiana u.</i>)	Bloomington, Ind.
Simpson, Harry Hudson, <i>sp</i>	Ph.B. (<i>Grove City c.</i>), Pa.	Minonk
Smith, Frank Weller, <i>s</i>	<i>Indiana State Normal</i>	Frankfort, Ind.
Smith, Ralph Homer, <i>s</i>	A.B. (<i>u. of Chicago</i>) '02	Washington

NAME	SCHOOL OR INSTRUCTOR	HOME ADDRESS
Smith, Adolph Belmont, <i>a w sp</i>	B.S. (<i>u. of Wisconsin</i>) '03	Brooklyn, Wis.
Snider, Alvin Bricker, <i>s</i>	S.B. (<i>u. of Chicago</i>) '02	Chicago
Speik, Frederick, Adolph <i>a w sp</i>	<i>Junior c. (u. of Chicago)</i>	Chicago
Spencer, Harry Stillman, <i>a w sp</i>	<i>Junior c. (u. of Chicago)</i>	Kankakee
Spencer, Charles H., <i>s</i>	<i>Iowa State Normal</i>	Des Moines, Ia.
Spiegelberg, Edward Henry, <i>s a w sp</i>	<i>Boscobel hs.</i>	Boscobel, Wis.
Spooner, John Paul, <i>s</i>	A.B. (<i>Indiana u.</i>) '00	Peru, Ind.
Statler, Oliver Isaiah, <i>s a w sp</i>	S.B. (<i>Wilmington c.</i>)	Wilmington, O.
Stauffer, Charles John, <i>a w sp</i>	B.S. (<i>Northwestern c.</i>)	Monroe, Wis.
Stephen, Oliver Zuinglis, <i>s</i>	<i>Austin c.</i>	Lakewood
Stern, William, <i>w sp</i>	<i>Junior c. (u. of Chicago)</i>	Joliet
Steers, James Griffin, <i>a w</i>	<i>u. of Michigan</i>	Montgomery, Ala.
Stevenson, Frank Hastings, <i>s</i>	A.B. (<i>Wabash c.</i>) '08; <i>Rush medical c.</i>	Rising Sun, Ind.
Stewart, William Edgar, <i>s</i>	A.B. (<i>Albany c.</i>) '97	Albany, Ore.
Stewart, Earle, Bryan, <i>s</i>	<i>Rush medical c.</i>	Mason City, Ia.
Stiles, Lee Crosby, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Austinburg, O.
Stocking, Fred Foster, <i>s a w sp</i>	<i>Fort Worth u.</i>	Clarendon, Tex.
Straus, David Copperfield, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Chicago
Sumner, John True, <i>s a w sp</i>	A.B. (<i>u. of Nebraska</i>) '99	Omaha, Neb.
Sundwall, John, <i>s a w sp</i>	Ph.B. (<i>Central u. of Utah</i>) '01; D.B. (<i>Ibid.</i>) '02	Fairview, Utah.
Terry, Oliver Perkins, <i>a w sp</i>	B.S. (<i>Purdue u.</i>) '03	Lafayette, Ind.
Test, Lous Agassiz, <i>s</i>	<i>Purdue u.</i>	Lafayette, Ind.
Thomas, Hall Herbert, <i>s a w sp</i>	B.S. (<i>Iowa State c.</i>) '00	Decorah, Ia.
Thomas, Roy Eccles, <i>a w sp</i>	B.S. (<i>Pomona c.</i>) '03	Phoenix, Ariz.
Thompson, Harold Benjamin, <i>a w sp</i>	<i>Lawrence u.</i>	Appleton, Wis.
Thut, Benjamin, Franklin, <i>s</i>	<i>Ohio Normal u.</i>	Rawson, O.
Toy, James Duffield, <i>s</i>	A.B. (<i>Washburn c.</i>) '00	Cherryvale, Kan.
Tussing, Perry Irwin, <i>s a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Chicago
Tyree, Joseph Edgar, <i>a w sp</i>	A.B. (<i>u. of Oregon</i>)	Dillon, Mont.
Venn, Theodore Henry, <i>a w sp</i>	A.B. (<i>Carrisins c.</i>) '03	Chicago
Walker, Thomas Samuel, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Riceville, Ia.
Was, Frank Peter Jacob, <i>s</i>	<i>Calumet hs.</i>	Chicago
Webster, Harry Elgin, <i>s a w sp</i>	<i>North Dixon hs.</i>	Dixon
Welker, Vincent Bernard, <i>a w</i>	S.B. (<i>u. of Notre Dame</i>) '01	Gambier, O.
Wellington, Richard Howells, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Haitwell, O.
Wheeler, Herbert Edward, <i>sp</i>	<i>Senior c. (u. of Chicago)</i>	Grant Park
Wheelock, Warren Overton, <i>s a w</i>	S.B. (<i>Louisiana State u.</i>)	McComb City, Miss.
Whitacre, Thomas Oleanus, <i>s a w sp</i>	<i>Bethany c.</i>	Bowling Green, O.
Whitelaw, Henry Neill, <i>s a w sp</i>	<i>Missouri State Normal s.</i>	Kidder, Mo.
Williams, Reuben Worrell, <i>s a w sp</i>	<i>Bloomington hs.</i>	Bloomington
Williams, Edward Marsh, <i>s</i>	S.B. (<i>u. of Chicago</i>) '02	La Grange
Williamson, Norman Eccles, <i>s</i>	<i>u. of Michigan</i>	La Grange
Winnick, Joseph Bernard, <i>a w sp</i>	<i>Junior c. (u. of Chicago)</i>	Sheboygan, Wis.
Winter, John Arthur, <i>s</i>	<i>u. of Michigan</i>	Negaunee, Mich.
Winsor, Sanford Archibald, <i>a w sp</i>	<i>Senior c. (u. of Chicago)</i>	Neponset
Woodruff, Harry Wheeler, <i>s</i>	M.D. (<i>c. of Physicians and Surgeons</i>)	Joliet
Young, Otto Nathaniel, <i>sp</i>	(<i>u. of Chicago</i>)	Lindsburg, Kan.

JUNIOR CLASS.

NAME	HOME ADDRESS	NAME	HOME ADDRESS
Adams, John Francis	Groton, S. D.	McClusky, Otto Wilber,	Traverse City, Mich.
Adams, Orville Louis, A.B.	Colfax, Wash.	McCord, Frances	Chicago
Allin, Frank Wesley, B.S.	Coffeyville, Kans.	McCumber, Arthur Irving	Lewiston
Allison, Otis Wood,	State Line, Ind.	McCumber, Clarence Nicholas	Lewiston
Autrey, Alfred Ranson, A.B.	Latania, Miss.	McCurdy, Edgar Henry	Fairfield, Me.
Baer, Joseph Louis, B.S., M.S.	Chicago	McKenna, Charles Morgan	Platteville, Wis.
Bartlett, John Donnington, A.B.	Galesburg	MacNab, Alexander Blake	Chicago
Beaton, Lindsay Alexander, B.S.	Chicago	Marvel, William Justin	Waynesville, Ind.
Beery, Harvey Reber, A.B.	Canal Winchester, O.	Mason, Stephen Coddling, Jr.,	Chicago
Bendixen, Peter Alfred, B.S.	Gladbrook, Ia.	Mathews, Gustav Adolph	Lester Prairie, Minn.
Boslough, Arthur William	Storm Lake, Ia.	Mattox, Ernest L., A.B.	Terre Haute, Ind.
Braude, Morris,	Chicago	Melaas, Wilber Guy	Houghton, Wis.
Breyfogle, Herbert Arthur, A.B.	Delaware, O.	Menzies, Robert Campbell	Rock Prairie, Wis.
Brown, Orville Harry, A.B.	Sabetha, Kans.	Moorehead, Frederick Brown, D.D.S.,	Chicago
Brown, Raymond Samuel	Atlantic, Ia.		Broadhead, Wis.
Buchsbaum, Maurice, B.S.	Chicago	Murdock, Harry Dale, B.S.	Chicago
Castle, Harry Edward	Hubbard, Minn.	Myers, Jacob	Rossville, Ind.
Castle, Stanley	Springfield, Ill.	Neher, Edwin Manson, A.B., B.S.	
Coleman, Stanley Ray	Howell, Mich.	Neilson, Charles Hugh, A.B., A.M.,	Chicago
Corkery, John Ripley	Toledo, O.	Ph.D.	Chicago
Cruikshank, Roswell Dwight, Ph.B.	Humboldt, Ia.	Nicolai, John Leonard	Chicago
Curtis, Arthur Hale, B.S.	Madison, Wis.	Oliver, Alfred Shelton, Jr., A.B.	Elverton, Ga.
Dalton, Ernest Charles,	St. Helena, Ore.	Olsen, Martin Ingeman, A.B.	Hersher
DeLong, Charles Alanson, A.B.	Montour, Ia.	Ostling, Carl August	Des Moines, Ia.
Dick, George Frederick,	Ft. Wayne, Ind.	Oyen, Albert Nelson, A.B.	Chicago
Dillon, J.	Washburn, N. D.	Padgett, Everett Ervin	Carlisle, Ind.
Edwards, Hugh Jonas, A.B.	Cambria, Wis.	Perry, Wilson James	Melvin
Fairchild, James Henry, A.B.	Riverside, Calif.	Purcell, Albert Charles	Streator,
Fortney, Gehard Olans, B.S.	Viroqua, Wis.	Quist, Frank Julius	Stromsberg, Neb.
Fox, Galen Adis,	Durand, Wis.	Ranson, Stephen Walter, B.S.	Dodge Center, Minn.
Freytag, Charles Fred,	Reynolds	Rathje, Fred Conrad	Chicago
Gleysteen, Richard J., Ph.B.	Alton, Ia.	Reed, Albert Earl	Larned, Kans.
Goheen, Robert Harold, A.B.	Wooster, O.	Rehling, Charles Frederick	Ft. Wayne, Ind.
Hale, David Jones,	Benton Harbor, Mich.	Ritchey, Romney Moor, A.B.	Portage City, Wis.
Halperin, George,	Chicago	Rothrock, Wilburn Joseph, A.B.	Lawrence, Kans.
Hanley, Erestus Talbot, B.S.	Prairie Creek, Ind.	Ruegnitz, Louis Herman	Chicago
Harwood, Charles B., A.B.	Wattsburg, Pa.	Sandberg, Charles Theodore	Ishpeming, Mich.
Hayes, Woodward Harris	Albion, Ind.	Sauthoff, August, B.S.	Madison, Wis.
Heinen, John Henry, B.S.	Ambia, Ind.	Sawyer, Carl Walker	Marion, O.
Hill, James Charlesworth, A.B.	Newton, Ia.	Schoemaker, Daniel M., B.S.	Muscatine, Ia.
Hook, Harriet Anna,	Chicago	Scholler, Alphonse F.	Ironwood, Mich.
Hoon, Arthur Samuel,	Dixon	Schwingel, William Henry	Aurora
Howell, Emmett James	Fish Haven, Idaho	Senn, George, B.S., M.S.	Oshkosh, Wis.
Hunter, Charles Dana, B.S.	Merrill, Wis.	Sensenich, Roscoe Lloyd	Wakarusa, Ind.
Ingbert, Charles Emerson, A.B.,		Sethney, Henry T.	Norway, Mich.
Ph.D.	Chicago	Shanklin, Robert Clarence, B.S.	Frankfort, Ind.
Jacobs, Wilma H., B.S.	Chicago	Shirley, Wayne McKnight, A B.	Shoals, Ind.
Jeffreys, Oliver Anderson,	Weiser, Idaho	Sloane, Harry Francis	Buena Park, Calif.
Johnson, Arthur Edward,	Davison, Mich.	Smith, Wallace Joe	Cadillac, Mich.
Johnston, Oscar Percy, Ph.B., M.S.	VanCleve, Ia.	Snider, Alvin Bricker, S.B.	Chicago
Karasek, Matthew, B.S.	Tacoma, Wash.	Spooner, John Paul, A.B.	Peru, Ind.
Keech, Roy Kneale,	Oxford Junction, Ia.	Stacy, Leda June	Rochester, Minn.
Kitzing, Frederick Ferd,	Halle a S. Germany	Stevenson, Frank Hastings, A.B.	Rising Sun, Ind.
Klein, Sidney, B.S., M.S.	Chicago	Stewart, William Edgar, A.B.	Albany, Ore.
Klick, John Joseph,	LaCrosse, Wis.	Tate, Louis Neill, B.S.	Knoxville
Knox, James McBryde, Ph.B.,	Cedar Rapids, Ia.	Taylor, James Henry	Fergus, Ont.
Krahn, Adolph John,	Huilsburg, Wis.	Toy, James Duffield, A.B.	Cherryvale, Kans.
Kroesch, Theodore,	Lorraine, Kans.	Van de Erve, Hubert	Holland, Mich.
Landes, George Albert,	Blackburn, Okla.	Was, Frank Peter Jacob	Chicago
Lewis, John Francis,	Chicago	Werk, George Herancourt	Cincinnati, O.
Lowe, Ausby Lyman, B.S.	Robinson	Wetzler, Sidney Herbert	Milwaukee, Wis.
Lucas, Harold Roy	Lyons, Kans.	Williamson, Norman E.	LaGrange, Ill.
Ludden, Homer Dexter,	Boscobel, Wis.	Woodside, Edward E.	Creal Springs
Lynch, Matthew John, B.S.	Madison, Wis.		

SENIOR CLASS.

NAME	HOME ADDRESS	NAME	HOME ADDRESS
Abelmann, Henry William	Palatine	Gephart, Curtis Hicks, B.S.	Valley Falls, Kans.
Ahrens, Edward Guy	Davenport, Ia.	Green, Dwight Monroe, B.S.	Muncie, Ind.
Allison, Robert Seaman	Rockwell City, Ia.	Harms, Arthur Henry	Dixon
Avery, Hazen Lorenzo, B.S.	Pomona, Calif.	Hartmann, William Michael	Arcadia, Wis.
Badger, Paul Raymond	Toledo, O.	Hatfield, Wayne Warren	Eckman, W. Va.
Baldwin, Leon Alva, B.S.	Red Oak, Ia.	Hawley, Frank Stacy	Alpha
Banker, Edward U.	Aurora	Hayden, Austin Albert, B.S., M.A.	Shullsburg, Wis.
Barclay, Charles Kenna	Peoria	Hayden, John Gardner	Holton, Kans.
Barnett, Arthur Franklin, B. S.	Hallsville	Heaney, Noble Sproat, A.B.	Quincy
Batman, Fred Henry, A.B.	Bloomington, Ind.	Hedger, Caroline, M.D.	Chicago
Benson, Gideon H., B.S.	Richland Center, Wis.	Henning, Oswald Frederick	Chicago
Berfield, Clyde	Toulon	Higgins, Samuel George, B.S.	Sault St Marie, Can.
Bergstrom, Victoria, C.A.	Chicago	Hill, Earl Vernon	Andover, O.
Best, Bruce Taylor	Arlington Heights	Hodges, Vernard Reno	Lead, S. D.
Best, Charles Lorton, A.B.	Freeport	Hogan, Thomas Aldhelm	Chicago
Bliss, Rodney Waldo, A.B.	Minden, Neb.	Holmes, Bayard, Jr., A.B.	Chicago
Blumer, Edward, B.S.	Monroe, Wis.	Hood, Mary E.	Sioux City, Ia.
Boose, William Rudolph, B.S.	Falls City, Neb.	Horovitz, James Samuel, L.B.	
Bradley, Edwin Bruce	Charles City, Ia.	Horton, Jessie Margaret, A.B.	Chicago
Bradley, William W.	Decatur, Mich.	Howell, Harry Lee	Chicago
Brown, Ralph Crissman, B.S.	Chicago	Hoyne, Archibald, Lawrence, A.B., B.S.	
Bruner, Jonathan Edward	Carroll, Ia.	Huston, John Walter, B.S.	Chicago
Bryant, Charles Page	Pittsburg, Pa.	Irons, Ernest Edward, B.S.	Gibson City
Buckley, Edward John	Chicago	Ivec, Martin	Chicago
Burlew, Jesse Manning, S.M.	Grinnell, Ia.	Jackola, John, B.S.	Cold Springs, Minn.
Butzke, Ernest John	West Bend, Wis.	Joffee, William	Hancock, Mich.
Calkins, Seba Boyd	Ottawa	Jongewaard, Albert C.	Chicago
Carpenter, Locke Houghton	Chicago	Jungels, William Witry	Orange City, Ia.
Carrier, Sidney S.	Pittsburg, Pa.	Keating, Robert Emmet	Dubuque, Ia.
Cavanaugh, Thomas Edward	Milwaukee, Wis.	King, George Andrew	Denver, Colo.
Childs, Hal Augustan	Lenox, Ia.	Kinney, Ralph Henry	Clarion, Ia.
Clapp, Fred Raymond	Albion, Ind.	Kirtley, Howard Pendleton, Ph.B.	Lancaster, Wis.
Clark, Charles Patton, A.B.	Bloomington, Ind.	Klopsch, Clara Frances	Peoria
Clay, Harry Elwin	Pomona, Calif.	Knauf, George Edmund	Michigan City, Ind.
Clutter, Thomas Jay	Ft. Wayne, Ind.	Koch, George William	Sheboygan, Wis.
Collins, William White	Danville	Kohn, Frederick Abraham	Akron, Ia.
Colver, Harley Ross, B.L.	New Lisbon, Wis.	Kradwell, William Theodore	Chicago
Crabb, James Maurice	West Plains, Mo.	Krogh, Clarence Alfred	Boscobel, Wis.
Cramer, Jacob T.	Muskegon, Mich.	Laird, John Jamison	Mt. Horeb, Wis.
Crawford, Lawrence Pears,	Taylor Ridge	Lane, Robert Nelson	Hortonville, Wis.
Cunningham, Orval James	Keytesville, Mo.	Lee, Edgar C.	Danville
Cunningham, William Jamison Mc-		Leete, Herbert Nelson, Ph.B., B.S.	Chicago
Clement, A.B.	Chicago	Lester, Pliny Penn, B.S.	Sparta, Wis.
Dale, William Henry	Chicago	Lindorff, Oscar William, B.S.	Walsenburg, Colo.
Davis, David John, B.S.	Racine, Wis.	Lowe, Frederick McKendrie	New Windsor
Davis, Elmer Jones	Shideler, Ind.	McClure, Franklin Evans, A.B.	Lathrop, Mo.
Davis, George Gilbert	Chicago	McClure, John Howard	Medapolis, Ia.
Davis, Homer Jury, B.S.	Newark, O.	McCollum, S. Josephine, M.D.	St. Paul, Minn.
DePew, Evarts Vaine	Wolf Lake, Ind.	McCusker, Clarence Joseph	Chicago
Dickey, Claude George, Ph.B.	Maxwell, Ia.	McDonald, Charles Henry, A.B.	Decorah, Ia.
Dondanville, Martin Sherman	Serena	McKibben, Ernest Collett, B.S.	Arthur
Doyle, Thomas Francis	El Paso	McShane, John James Hugh	Chicago
Dunn, James	Clinton, Ia.	Mackintosh, James Atwood	Ivesdale
Elliott, Mabel Evelyn	Chicago	Madler, Nicholas Allen	Flint, Mich.
Ellsworth, Elmer Harvey, B.S.	Hot Springs, Ark.	Mains, James Roy, A.B.	Appleton, Wis.
Epley, Otis Hoyt	New Richmond, Wis.	Manning, Ernest Tibbetts, B.S.	Oskaloosa, Kan.
Ervin, Charles William	Lincoln, Neb.	Matter, Lloyd Emerson	Galesburg
Fischer, Walter Dederick, A.B.	Elmhurst	Maxwell, Hugh Smith, A.B.	Freeport
Foreman, Brady Hugh	Chicago	Meengs, Jacob Earl	Rockville, Ind.
Fowler, Alfred Hugh, A.B.	Chicago	Metcalf, Howard Lee	Grand Rapids, Mich.
Fraunfelder, Clare Edwin, A.B., B.S.	Canton, O.	Miller, Daniel Burton	Mechanicsburg
Garrison, Frederick Franklin	Chicago	Miller, Elsie Prince, B.S.	Greencastle, Ind.
Garrity, James	Elroy, Wis.	Morrell, Joseph Rowland	Aurora
Gauss, Julius Henry Philip, B.S.	Chicago		Logan, Utah

NAME	HOME ADDRESS	NAME	HOME ADDRESS
Neubert, Christian Ludwig	Denver, Colo.	Shearer, William Alexander	Clarence, Ia.
Nickerson, Anson LeRoy	Chatham, Ont.	Shephard, John Hunt, B.S.	Ft. Madison, Ia.
Nixon, Samuel Daniel	Kearney, Neb.	Shinnick, John Dill,	Watertown, Wis.
O'Brien, Edward Joseph	Chicago	Smedal, Greggar, A.B.	Flatdal, Norway
O'Connell, Joseph	Watertown, Wis.	Smith, George Bertnard, B.S.	Knoxville
O'Hern, Michael James, A.B.	DeWitt, Ia.	Smith, George Carroll, A.B.	Flora
O'Leary, Austin Joseph	Negaunee, Mich.	Smith, Turner Burton	Gainesville, Tex.
Oosterbeek, John Geddes	Chicago	Smith, William E.	Little York
Papot, Grace Elliott	Chicago	Speed, Kellogg, B.S.	Chicago
Payne, Perry Joshua, B.S.	Cleveland, O.	Steely, George, Jr., B.S.	Danville
Pearson, Charles Magnus	Ogema, Wis.	Stewart, Earle Bryan	Mason City, Ia.
Pearson Louis Mossop	Madison, Wis.	Swift, William James	Kansas City, Mo.
Peters, William Robert	Basswood, Wis.	Teegarden, Joseph Archibald	Attica, Ind.
Phemister, Dallas B.	Carbondale	Thorek, Max	Chicago
Post, Wilber E., Ph.B.	Lowell, Mich.	Troutman, Rodney Elbridge	Logansport, Ind.
Potts, Frank Tuthill	Lacon	Tucker, George Eugene, B.S.	Humboldt, Neb.
Pratt, George N.	Chicago	Underwood, Frank	Chicago
Prouty, Lee Blanchard	Tracy, Minn.	Vail, Ruth, B.S.	Marengo
Reed, Edward North, A.B.	Andover, Mass.	VanDerhoof, Don Allison, B.L.	Wheaton
Rendleman, William Harris	Carterville	VanDruff, Lucius Marchand	Valley Falls, Kan.
Renwick, Joe Clyde	Warren	Vaughan, Roger Throop, Ph.B.	Chicago
Reynolds, Hardin Williams, B.S., M.D.	Bristol, Tenn.	Verberkmoes, John Martin, B.S.	Madison, Wis.
Root, William Webster	Chicago	Viers, John Wesley	Burlington, Ia.
Salamson, Max Jason	Chicago	Wakefield, Arthur Paul, Ph.B.	Hiram, O.
Sammons, George Whittenhal Hess, B.S.	Wattsburg, Pa.	Watson, Royal Latham	Joliet
Saunders, Jones Lindsey	Cayuga, Ind.	Watson, Roy Seymour	Breckinridge
Scheer, George Henry, B.S.	Sheboygan, Wis.	Waugh, John Franklin, B.S.	Fairfax, Mo.
Schwartz, Arthur H.	Norway, Mich.	Weber, Albert Andrew, B.S.	Jackson, Mich.
Sether, Alvin Fernando	Waupaca, Wis.	Werner, Nels	Chicago
Shaffrey, Clarence Eugene	Logansport, Ind.	Wescott, Orville DeWitt, B.S.	Gladbrook, Ia.
		Wicherski, Otto Gustav	New Ulm, Minn.
		Willard, Harry Gaylord, Ph.B.	Grinnell, Ia.
		Withersteine, William Horace	Rochester, Minn.

SUMMARY.

Freshmen and Sophomores	310
Juniors	124
Seniors	189
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	623
Post Graduates and Specials	461
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	1,084
Duplicates	51
	<hr/>
	1,033

